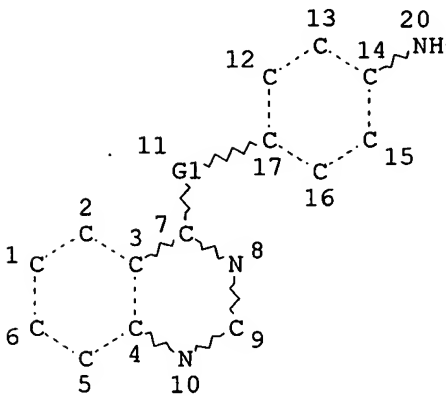
Truong, T.
10/088814

(FILE 'REGISTRY' ENTERED AT 14:57:04 ON 02 FEB 2005)

L1 STR



STR. Claim 19

VAR G1=O/S/NH/18
VAR G2=23/SO2
NODE ATTRIBUTES:
NSPEC IS RC AT 22
DEFAULT MLEVEL IS ATOM
GGCAT IS LOC AT 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.01

FILE 'CAPLUS' ENTERED AT 15:00:09 ON 02 FEB 2005
L4 14 S L3
L5 5 S L4 NOT (PY=>1999 OR PD=>19990921)

E568 THROUGH E573 ASSIGNED

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:38682 CAPLUS
DOCUMENT NUMBER: 128:167414
TITLE: Preparation of thiazolyloxyphenylmethanesulfonamides as herbicides
INVENTOR(S): Sato, Kazuo; Kudo, Noriaki; Honma, Toyokuni; Isarai, Kiyoshi; Kadotani, Junji
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007657	A2	19980113	JP 1996-158177	19960619
PRIORITY APPLN. INFO.:			JP 1996-158177	19960619
OTHER SOURCE(S):	MARPAT 128:167414			

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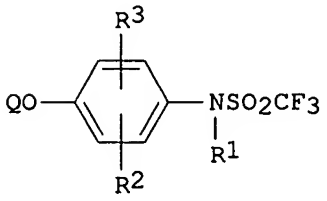


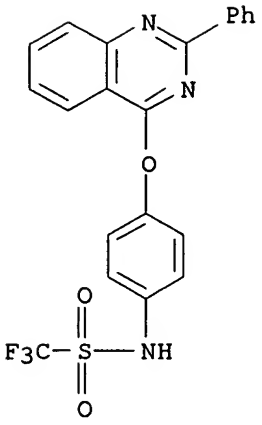
I

AB Sulfonamides I (R1 = H, C2-6 alkanoyl, benzoyl; R2, R3 = H, halo, NO2, cyano, (substituted) lower alkyl, (substituted) lower alkoxy, etc.; R2R3 may form Ph or naphthalene; Q = (substituted) pyrazinyl, (substituted) 4-pyrimidinyl, (substituted) oxazolyl, (substituted) thiazolyl, (substituted) quinoxalyl, (substituted) quinazolyl, etc.; if Q = thiazolyl and R2 = R3, then R2 = R3 ≠ H) are prepared 2-(4-Amino-3-methoxycarbonylphenoxy)-4-chloro-5-difluoromethylthiazole was amidated with F3CSO3H in the presence of Et3N in CH2Cl2 under ice-cooling for 30 min, decomposed with NaOH in THF-H2O at room temperature for 1 h to give 86% I (R1 = H, R2 = 2-CO2Me, R3 = H, Q = 4-chloro-5-difluoromethyl-2-thiazolyl) (II). II at 5 g/a preemergence controlled 91-100% Echinochloa oryzicola and broadleaf weeds, 71-90% Scirpus juncoides, and 31-50% Cyperus serotinous growth without damaging rice plants.

IT **202752-73-6**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(preparation of phenylmethanesulfonamides as herbicides)

RN 202752-73-6 CAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[4-[(2-phenyl-4-quinazolinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:462220 CAPLUS
DOCUMENT NUMBER: 125:114665
TITLE: Preparation of quinoline and quinazoline protein tyrosine kinase inhibitors
INVENTOR(S): Hudson, Alan Thomas; Vile, Sadie; Barraclough, Paul; Franzmann, Karl Witold; McKeown, Stephen Carl; Page, Martin John
PATENT ASSIGNEE(S): Wellcome Foundation Limited, UK
SOURCE: PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9609294	A1	19960328	WO 1995-GB2202	19950918
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9534824	A1	19960409	AU 1995-34824	19950918
ZA 9507853	A	19970318	ZA 1995-7853	19950918
EP 782570	A1	19970709	EP 1995-931351	19950918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10505600	T2	19980602	JP 1995-509740	19950918

PRIORITY APPLN. INFO.:

GB 1994-18852	A	19940919
GB 1995-7788	A	19950413
GB 1995-10757	A	19950526
WO 1995-GB2202	W	19950918

OTHER SOURCE(S): MARPAT 125:114665
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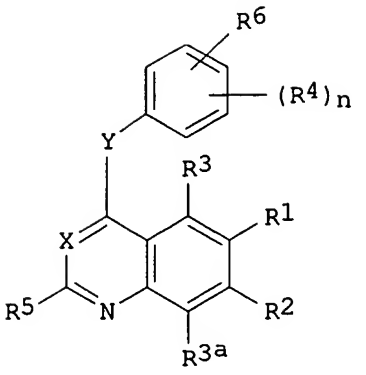


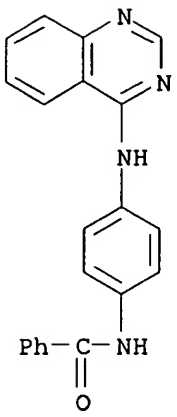
I

AB The title compds. [I; X = N, CH; Y = W(CH2), (CH2)W, W; W = O, S(O)m, (un)substituted NH; R1 = NH2, H, halogen, OH, NO2, CO2H, CF3, CF3O, ureido, etc.; R4 = H, OH, halogen, alkyl, alkoxy, alkylthio, CN, NO2, CF3, etc.; n = 1-3; R5 = H, halogen, CF3, alkyl, alkoxy; R6 = substituted hydrocarbyl, etc.], which are protein tyrosine kinase inhibitors, are prepared Thus, 4-chloroquinoline was reacted with 4-methoxyaniline in the presence of HCl, producing 4-(4-phenoxyanilino)quinoline hydrochloride, m.p. 216-218°, which demonstrated a IC50 against p561ck protein tyrosine kinase of 5 μM.

IT **179247-41-7P 179247-42-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoline and quinazoline protein tyrosine kinase inhibitors)

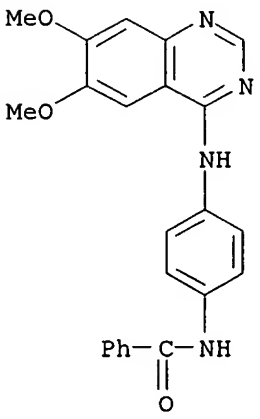
RN 179247-41-7 CAPLUS

CN Benzamide, N-[4-(4-quinazolinylamino)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

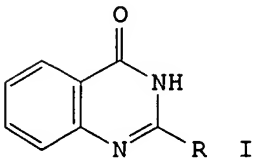
RN 179247-42-8 CAPLUS
CN Benzamide, N-[4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1990:515229 CAPLUS
DOCUMENT NUMBER: 113:115229
TITLE: Novel 4-phenoxy-2-(1-piperazinyl)quinazolines as potent anticonvulsive and antihypoxic agents
AUTHOR(S): Hori, Manabu; Iemura, Ryuichi; Hara, Hideaki; Ozaki, Akio; Sukamoto, Takayuki; Ohtaka, Hiroshi
CORPORATE SOURCE: Pharm. Res. Cent., Kanebo Ltd., Osaka, 534, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1990), 38(3), 681-7
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 113:115229
GI



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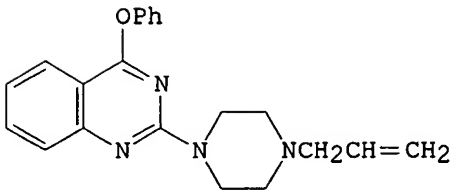
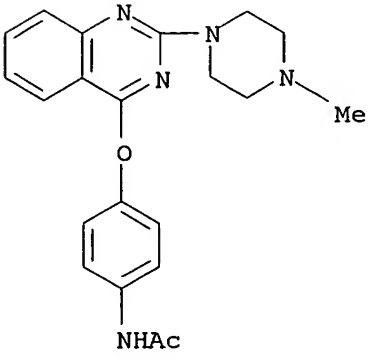


II

AB A series of 4-phenoxy-2-(1-piperazinyl)quinazolines was synthesized from quinazolinones I (EtS, Cl, 1-piperazinyl, 4-methyl-1-piperazinyl) and examined for anticonvulsive and antihypoxic activities. Many of the compds. exhibited potent anticonvulsive activity comparable to that of carbamazepine or phenytoin. Among them, 4-phenoxy-2-(4-propyl-1-piperazinyl)quinazoline (II) was selected as the most promising candidate antiepileptic drug with few side effects. It seemed that potent anticonvulsive activity was a prerequisite for potent antihypoxic activity.

IT **129112-43-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, antihypoxic and anticonvulsant activity of)
RN 129112-43-2 CAPLUS
CN Acetamide, N-[4-[[2-(4-methyl-1-piperazinyl)-4-quinazolinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)



proviso out

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1978:948 CAPLUS
DOCUMENT NUMBER: 88:948
TITLE: Synthesis and fungistatic activity of aryloxyquinazoline derivatives

Searcher : Shears 571-272-2528

AUTHOR(S): Serafin, Barbara; Modzelewski, Maciej; Kurnatowska, Alicja; Kadlubowski, Roscislaw
CORPORATE SOURCE: Inst. Org. Chem. Technol., Politech. Warsaw, Warsaw, Pol.
SOURCE: European Journal of Medicinal Chemistry (1977), 12(4), 325-31
CODEN: EJMCA5; ISSN: 0223-5234
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 88:948
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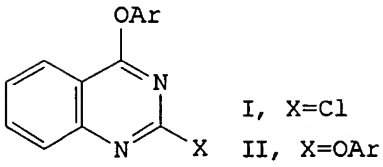
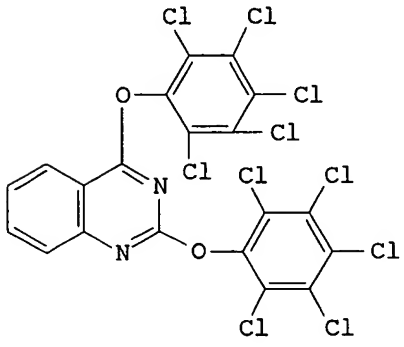


I, X=Cl
II, X=OAr



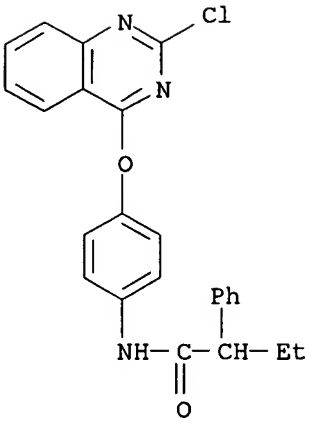
III

AB 2-Chloro-4-aryloxyquinazolines (I) and 2,4-diaryloxyquinazolines (II) were synthesized by reacting 2,4-dichloroquinazoline [607-68-1] with substituted phenols. Of the 50 aryloxyquinazoline derivs. tested for fungistatic activity, >80% of the compds. showed moderate to good inhibition of fungal growth. The diaryloxyquinazoline with pentachloro substitution on both groups (III) [61067-67-2] had the greatest fungistatic activity. A few 2-arylamino-4-aryloxyquinazolines were also synthesized by reacting 2-chloro-4-aryloxyquinazolines with aniline [62-53-3] or 4-chloroaniline [106-47-8].

IT **64778-21-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
(preparation and fungicidal activity of)

RN 64778-21-8 CAPLUS

CN Benzeneacetamide, N-[4-[(2-chloro-4-quinazolinyl)oxy]phenyl]-α-ethyl- (9CI) (CA INDEX NAME)



L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1976:543129 CAPLUS
DOCUMENT NUMBER: 85:143129
TITLE: Ether derivatives of quinazoline
INVENTOR(S): Serafin, Barbara; Modzelewski, Maciej; Kadlubowski, Rozcislaw; Kurnatowska, Alicja
PATENT ASSIGNEE(S): Politechnika Warszawska, Pol.
SOURCE: Pol., 2 pp.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PL 78381	B	19750630	PL 1972-157193		19720809
PRIORITY APPLN. INFO.:			PL 1972-157193	A	19720809

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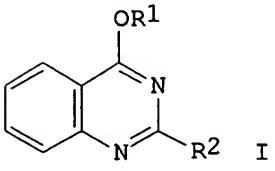
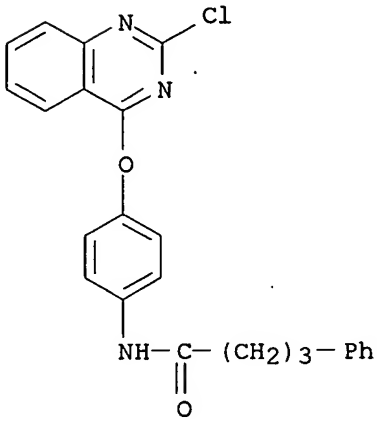


I

AB The (aryloxy)quinazolines I (R1 = C6H3Cl2-2,4, C6H4F-4, C6H4NO2-o, C6H4Cl-o, C6H3Cl2-3,5, C6H2Cl3-2,4,6, C6Cl5; R2 = Cl, C6H4Cl-o, C6H4NO2-o, C6H4Cl-p, C6H4Cl2-3,5, C6F5) were prepared by treating 2,4-dichloroquinazoline (II) with the appropriate phenol. Thus, 3.1 g Ph(CH2)3CONHC6H4OH-p was heated with 2.4 g I,i in dioxane containing Na to give 4.1 g I [R1 = C6H4NHCO(CH2)3Ph, R2 = Cl].

IT **60096-89-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 60096-89-1 CAPLUS
CN Benzenebutanamide, N-[4-[(2-chloro-4-quinazolinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



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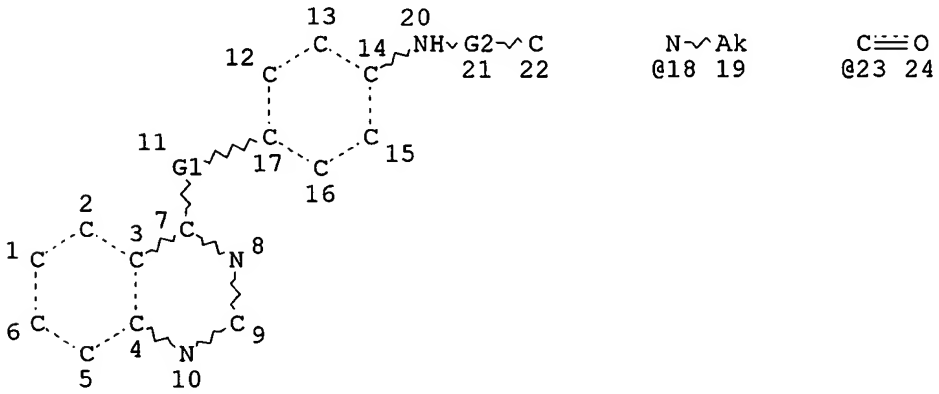
FILE 'CAOLD' ENTERED AT 15:06:12 ON 02 FEB 2005
L7 0 S L6

FILE 'USPATFULL' ENTERED AT 15:06:17 ON 02 FEB 2005
L8 0 S L6

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 15:06:25 ON 02 FEB 2005
L9 0 S L6

(FILE 'MARPAT' ENTERED AT 15:06:39 ON 02 FEB 2005)
L10 STR



VAR G1=O/S/NH/18
VAR G2=23/SO2
NODE ATTRIBUTES:
NSPEC IS RC AT 22
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 19
GGCAT IS LOC AT 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L12 27 SEA FILE=MARPAT SSS FUL L10 (MODIFIED ATTRIBUTES)
L13 26 SEA FILE=MARPAT ABB=ON PLU=ON L12/COMPLETE

L13 ANSWER 1 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 141:395802 MARPAT
TITLE: Preparation of substituted phenylalkanoic acids, including amino acid derivatives
INVENTOR(S): Van Zandt, Michael C.; Fang, Haiquan; Hu, Shaojing; Whitehouse, Darren
PATENT ASSIGNEE(S): The Institutes for Pharmaceutical Discovery, LLC, USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092146	A2	20041028	WO 2004-US11650	20040414
WO 2004092146	A3	20041229		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004248937	A1	20041209	US 2004-824057	20040414

PRIORITY APPLN. INFO.: US 2003-463102P 20030414
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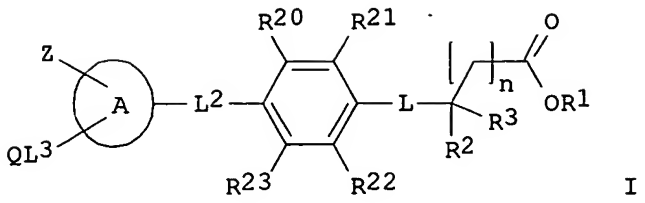

I

AB The invention relates to compds. I [n is 0-3; R1 is H, alkyl, phenylalkyl or alkenyl; R2 is Ph, phenylalkyl, alkyl, carbamoylalkyl, alkylsulfonylalkyl, heterocycloalkyl, etc.; R3 is H or CO2R1; R20-R23 are independently H, arylalkoxy, arylalkyl, halo, alkyl, OH, alkoxy, NO2, NH2, alkylamino, etc.; L is SO2NH, sulfonyl(alkylimino), NHSO2, O, CONH, carbonyl(alkylimino), SO2, carbonylalkylene, alkylenecarbonyl, NH or alkylimino (the alkyl group are optionally substituted with Ph or substituted phenyl); L2 is a bond, CONR9, NR9CO, alkylene-CONR9, NR9, etc. (R9 is H or alkyl optionally substituted with CO2H, arylsulfonyl or arylalkyl); ring A is (un)substituted Ph, naphthyl, thiazolyl, pyrazolyl, furanyl, dihydropyrazolyl, benzofuranyl, dibenzofuranyl, pyrimidyl, pyridyl, quinolinyl, naphthyl, quinazolinyl, benzo[b]thiophene, imidazolyl, isothiazolyl, pyrrolyl, oxazolyl or triazolyl; Q is H, aryl, arylcarbonylaryl, alkyl, halo, etc.; L3 is a bond, alkyleneoxy, oxyalkylene, alkylene, alkenylene or CO; Z is absent, H, aroylamino, (un)substituted Ph or cycloalkylcycloalkanoyl(alkyl)amino] and their pharmaceutically-acceptable salts, which are useful in the treatment of metabolic disorders related to insulin resistance or hyperglycemia. These compds. include inhibitors of protein tyrosine phosphatase (PTP-1B) that are useful in the treatment of diabetes and other PTP-1B mediated diseases such as cancer and neurodegenerative diseases. Thus, 2-[4-[4-(4-chlorophenyl)-5-(4-ethylphenyl)thiazol-2-ylcarbamoyl]benzenesulfonylamino]-3-phenylpropionic acid was prepared by cyclocondensation of 4-ClC6H4COCH2C6H4Et-4 (preparation given) with thiourea, acylation with 4-ClSO2C6H4CO2H, and coupling with phenylalanine tert-Bu ester hydrochloride. The product was shown to increase the glucose infusion rate in rats at 30 mg/kg.

IC ICM C07D277-00

CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 25, 63

ST phenylalkanoic amino acid prepn treatment insulin resistance or hyperglycemia

IT Antidiabetic agents
Diabetes mellitus
Hyperglycemia
(preparation of substituted phenylalkanoic acids, including amino acid derivs., for treatment of diabetes)

IT Amino acids, preparation
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted phenylalkanoic acids, including amino acid derivs., for treatment of diabetes)

IT 50-99-7, Glucose, biological studies 9004-10-8, Insulin, biological studies 300865-11-6, Protein tyrosine phosphatase 1B
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(preparation of substituted phenylalkanoic acids, including amino acid derivs., for treatment of diabetes)

IT 782483-59-4P 782483-66-3P 782483-67-4P 782483-70-9P 782483-73-2P
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782484-31-5P 782484-32-6P 782484-33-7P 782484-34-8P 782484-35-9P
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782484-41-7P 782484-42-8P 782484-43-9P 782484-44-0P 782484-45-1P
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782484-51-9P 782484-52-0P 782484-53-1P 782484-54-2P 782484-55-3P
782484-56-4P 782484-57-5P 782484-58-6P 782484-59-7P 782484-60-0P
782484-61-1P 782484-62-2P 782484-63-3P 782484-64-4P 782484-65-5P
782484-66-6P 782484-67-7P 782484-68-8P 782484-69-9P 782484-70-2P
782484-71-3P 782484-72-4P 782484-73-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted phenylalkanoic acids, including amino acid derivs., for treatment of diabetes)

IT 62-56-6, Thiourea, reactions 98-74-8, 4 Nitrobenzenesulfonyl chloride 99-91-2 99-92-3 104-83-6, 4 Chlorobenzyl chloride 402-23-3, 3 Trifluoromethylbenzyl bromide 623-03-0, 4 Chlorobenzonitrile 1467-05-6, 4 Ethylbenzyl chloride 1797-75-7, Diallyl malonate 3182-93-2 4748-78-1, 4 Ethylbenzaldehyde 10130-89-9, 4 Chlorosulfonylbenzoic acid 15100-75-1 18880-00-7, 4 tert Butylbenzyl bromide 73789-86-3, 4 Isopropylbenzyl bromide 94108-56-2, 4 Trifluoromethoxybenzenesulfonyl chloride 142179-84-8, 3 Iodomethyl pyridine 782483-75-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of substituted phenylalkanoic acids, including amino acid derivs., for treatment of diabetes)

IT 52629-53-5P 782483-57-2P 782483-58-3P 782483-60-7P 782483-61-8P
782483-62-9P 782483-63-0P 782483-64-1P 782483-65-2P 782483-68-5P
782483-69-6P 782483-71-0P 782483-72-1P 782483-76-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted phenylalkanoic acids, including amino acid derivs., for treatment of diabetes)

IT 104077-19-2
RL: PRP (Properties)
(unclaimed sequence; preparation of substituted phenylalkanoic acids, including amino acid derivs.)

L13 ANSWER 2 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 138:385442 MARPAT
TITLE: Preparation of (anilino)quinazolines as antitumor agents

INVENTOR(S): Hennequin, Laurent Francois Andre; Kettle, Jason Grant; Pass, Martin; Bradbury, Robert Hugh
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1444211	A2	20040811	EP 2002-774961	20021031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002013843	A	20040831	BR 2002-13843	20021031
PRIORITY APPLN. INFO.:			GB 2001-26433	20011103
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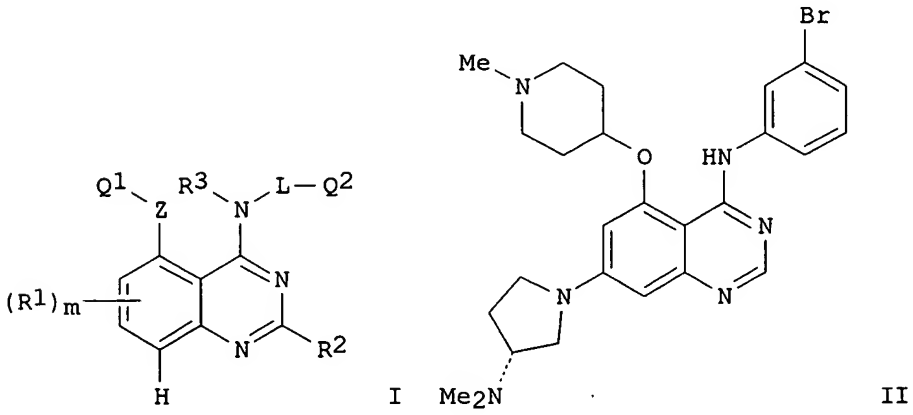

AB Title compds. I [wherein m = 0-2; n = 1-2; L = a bond or [C(R22)2]n; R1 = halo, CF3, CN, NC, NO2, OH, SH, NH2, CHO, CO2H, CONH2, or (un)substituted alkyl(oxy), alkenyl(oxy), alkynyl(oxy), alkylthio, alkylsulfinyl, alkylsulfonyl, (di)alkylamino, alkoxycarbonyl, (di)alkylcarbamoyl,

alkanoyl(oxy), (alkyl)alkanoylamino, (alkyl)alkenoylamino, (alkyl)alkynoylamino, (di)alkylsulfamoyl, (alkyl)alkanesulfonylamino, or Q3X1; or (R1)m = alkylenedioxy; with the proviso that adjacent alkylene C atoms within a R1 substituent are optionally interrupted by O, S, SO, SO2, NR5, CO, CHOR5, CONR5, NR5CO, SO2NR5, NR5SO2, CH=CH, or C.tplbond.C; R2 = H; R3, R4, R5, R11, R12, and R22 = independently H or alkyl; Q1 and Q3 = independently (un)substituted (hetero)aryl(alkyl), cycloalkyl(alkyl), cycloalkenyl(alkyl), or heterocyclyl(alkyl); with the proviso that adjacent alkylene C atoms within the Q1Z group are optionally interrupted by O, S, SO, SO2, NR12, CO, CHOR12, CONR12, NR12CO, SO2NR12, NR12SO2, CH=CH, or C.tplbond.C; Q2 = (un)substituted Ph, bicyclic (hetero)aryl, or bicyclic heterocyclyl; X1 = a bond, O, S, SO, SO2, NR4, CO, CHOR4, CONR4, NR4CO, SO2NR4, NR4SO2, OC(R4)2, SC(R4)2, or NR4C(R4)2; Z = a bond, O, S, SO, SO2, NR11, CO, CHOR11, CONR11, NR11CO, SO2NR11, NR11SO2, OC(R11)2, SC(R11)2, or NR11C(R11)2; and pharmaceutically acceptable salts thereof] were prepared for use in the prevention or treatment of tumors which are sensitive to inhibition of erbB receptor tyrosine kinases. For example, coupling of 3-(R)-(+)-dimethylaminopyrrolidine with 3,4-dihydro-5-hydroxy-7-fluoroquinazolin-4-one•CF3CO2H in NMP gave the pyrrolidinylquinazolinone (41%). Addition of chloromethyl pivalate in the presence of NaH in DMF afforded the 3-substituted derivative (62%), which was condensed with 4-hydroxy-N-methylpiperidine using PPh3 and di-tert-Bu azodicarboxylate in DCM to give the piperidinyloxyquinazolinone (77%). Deprotection (66%) using NH3 in MeOH, followed by chlorination with POCl3 and di-disopropylethylamine in dichloroethane provided 4-chloro-7-(3-(R)-dimethylaminopyrrolidin-1-yl)-5-(1-methylpiperidin-4-yloxy)quinazoline (81%). Coupling of the chloroquinazoline with 3-bromoaniline in the presence of HCl and IPA in dioxane yielded II•HCl (43%). The biol. activity of the example compds. was assessed in five assays. Thus, I inhibited the phosphorylation of a tyrosine-containing polypeptide substrate by epidermal growth factor receptor (EGFR) kinase, erbB2 kinase, and erbB4 kinase with IC50 values in the range of 0.001 μM - 10 μM. I also inhibited the proliferation of both human naso-pharyngeal carcinoma KB cells and non-neoplastic epithelial H16N-2 cells with IC50 values in the range 0.001 μM - 20 μM. In addition, I inhibited the growth of colorectal adenocarcinoma LoVo and human mammary carcinoma BT-474 tumor cell xenografts in vivo with activities in the range of 1 mg/kg/day to 200 mg/kg/day with no physiol. unacceptable toxicity at the ED.

IC ICM C07D239-94
ICS C07D401-14; C07D401-12; C07D407-12; C07D409-12; C07D403-12; A61K031-505; A61P035-00

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST anilino quinazoline prepn antitumor agent; anilinoquinazoline prepn erbB receptor tyrosine kinase inhibitor antitumor agent

IT Growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(heregulin, ErbB-4; preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT Antitumor agents
Human
Neoplasm
Phosphorylation, biological

(preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT Epidermal growth factor receptors
neu (receptor)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 525590-36-7P, 4-(Indol-5-ylamino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-37-8P, 4-(3-Chloro-4-hydroxyanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-38-9P, 4-(3-Methyl-4-hydroxyanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-56-1P, 5-[1-(tert-Butoxycarbonyl)piperidin-4-yloxy]-4-(3-chloro-4-fluoroanilino)-7-methoxyquinazoline 525590-63-0P, 4-(3-Chloro-4-fluoroanilino)-5-[(tetrahydrothiopyran-4-yl)oxy]quinazoline 525590-70-9P, 4-(3-Chloro-4-fluoroanilino)-5-[(tetrahydrothiophen-3-yl)oxy]quinazoline 525590-73-2P, 5-[1-(tert-Butoxycarbonyl)azetidin-3-yloxy]-4-(3-chloro-4-fluoroanilino)quinazoline 525591-11-1P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-[[1-(tert-butoxycarbonyl)piperidin-4-yl]methoxy]quinazoline 525591-14-4P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-[[1-(tert-butoxycarbonyl)piperidin-4-yl]methoxy]quinazoline 525591-25-7P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-(piperidin-4-yloxy)quinazoline 525591-27-9P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-(piperidin-4-ylmethoxy)quinazoline 525591-58-6P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(piperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(antitumor agent; preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 524954-19-6P, 4-(3-Chloro-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-12-9P 525590-14-1P 525590-15-2P 525590-16-3P 525590-17-4P 525590-18-5P 525590-19-6P 525590-20-9P 525590-21-0P 525590-22-1P 525590-23-2P 525590-25-4P 525590-27-6P 525590-28-7P, 4-(3-Bromoanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-29-8P, 4-(3-Chloroindol-5-ylamino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-30-1P, 4-(3-Ethynylanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-31-2P, 4-(Indazol-5-ylamino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-32-3P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-33-4P, 4-(3-Chloroanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-34-5P, 7-Methoxy-4-(3-methylanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-35-6P, 4-(3-Fluoroanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-39-0P 525590-40-3P 525590-41-4P 525590-42-5P 525590-43-6P, 4-(3-Bromoindazol-5-ylamino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-44-7P, 4-(3-Chloroindazol-5-ylamino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-45-8P, 4-[3-Chloro-1-(2-pyridylmethyl)indol-5-ylamino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-46-9P, 4-[3-Chloro-1-(2-pyridylmethyl)indazol-5-ylamino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-47-0P, 7-Methoxy-4-[3-methyl-4-(2-pyridylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-48-1P, 4-(3-Methylindol-5-ylamino)-5-(1-methylpiperidin-4-

yloxy)quinazoline 525590-49-2P, 5-(1-Methylpiperidin-4-yloxy)-4-((1R)-1-Phenylethylamino)quinazoline 525590-50-5P, 7-Methoxy-5-(1-methylpiperidin-4-yloxy)-4-((1R)-1-Phenylethylamino)quinazoline 525590-51-6P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(R)-dimethylaminopyrrolidin-1-yl)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-53-8P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525590-55-0P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525590-57-2P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-(3-(R)-dimethylaminopyrrolidin-1-yl)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-58-3P, 4-(3-Chloroanilino)-7-(3-(S)-dimethylaminopyrrolidin-1-yl)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525590-60-7P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-[(tetrahydrothiophen-3-yl)oxy]quinazoline 525590-62-9P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-(1-isopropylazetidin-3-yloxy)quinazoline 525590-65-2P, 4-(3-Chloro-4-fluoroanilino)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525590-66-3P, 4-(3-Chloro-4-fluoroanilino)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525590-67-4P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxyquinazoline 525590-68-5P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpyrrolidin-3-yloxy)quinazoline 525590-69-6P, 4-(3-Chloro-4-fluoroanilino)-5-(1-isopropylazetidin-3-yloxy)quinazoline 525590-71-0P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-3-yloxy)quinazoline 525590-72-1P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-74-3P, 4-(3-Chloro-4-fluoroanilino)-5-(1,1-dioxotetrahydrothiophen-3-yloxy)quinazoline 525590-75-4P, 4-(3-Chloro-4-fluoroanilino)-5-(1-oxotetrahydrothiophen-3-yloxy)quinazoline 525590-76-5P, 4-(3-Chloro-4-fluoroanilino)-5-(1,1-dioxotetrahydrothiopyran-4-yloxy)quinazoline 525590-77-6P, 4-(3-Chloro-4-fluoroanilino)-5-(1-oxotetrahydrothiopyran-4-yloxy)quinazoline 525590-78-7P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-79-8P, 4-[3-Chloro-4-(5-methylisoxazol-3-ylmethoxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-80-1P, 4-[3-Chloro-4-(thiazol-4-ylmethoxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-81-2P, 4-[3-Chloro-4-(4-pyridylmethoxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-82-3P, 4-(3-Chloro-4-benzyloxyanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-83-4P, 4-[3-Chloro-4-(2-cyanobenzyloxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-84-5P, 4-(4-Benzyloxy-3-methylanilino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-85-6P, 4-[4-(2-Fluorobenzyloxy)-3-methylanilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-86-7P, 4-[4-(2,6-Difluorobenzyloxy)-3-methylanilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-87-8P, 4-[4-(2-Cyanobenzyloxy)-3-methylanilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-88-9P, 4-[3-Methyl-4-(5-methylisoxazol-3-ylmethoxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-89-0P, 4-[3-Methyl-4-(thiazol-4-ylmethoxy)anilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-90-3P, 4-[4-(3-Fluorobenzyloxy)-3-methylanilino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-91-4P, 4-(3-Chloro-4-fluoroanilino)-7-(2-methoxyethoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525590-94-7P, 4-(3-Bromoanilino)-7-(2-methoxyethoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525590-98-1P, 4-(3-Chloro-4-fluoroanilino)-7-(2-methoxyethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-01-9P, 4-(3-Chloro-4-fluoroanilino)-5-

cyclopentyloxy-7-(2-methoxyethoxy)quinazoline 525591-04-2P, 7-(2-Methoxyethoxy)-4-(3-methylanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-07-5P, 4-(3-Chloro-4-fluoroanilino)-7-(2-methoxyethoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-13-3P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-(2-methoxyethoxy)quinazoline 525591-16-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-(2-methoxyethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-18-8P, 4-(3-Chloroanilino)-7-(1-methylpiperidin-4-ylmethoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-20-2P, 4-(3-Chloro-4-fluoroanilino)-7-(1-methylpiperidin-4-ylmethoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-22-4P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylazetidin-3-yloxy)quinazoline 525591-23-5P, 4-(3-Chloro-4-fluoroanilino)-7-(1-methylpiperidin-4-ylmethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-26-8P, 4-(3-Chloro-4-fluoroanilino)-7-[(piperidin-4-yl)methoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-28-0P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-(piperidin-4-ylmethoxy)quinazoline 525591-29-1P, 5-(N-Acetylpiperidin-4-yloxy)-4-(3-chloro-4-fluoroanilino)-7-methoxyquinazoline 525591-30-4P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-(1-propylpiperidin-4-yloxy)quinazoline 525591-31-5P, 5-(1-Ethylpiperidin-4-yloxy)-4-(3-chloro-4-fluoroanilino)-7-methoxyquinazoline 525591-32-6P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-5-[1-(2-methoxyethyl)piperidin-4-yloxy]quinazoline 525591-33-7P, 4-(3-Chloro-4-fluoroanilino)-5-[1-(2-propynyl)piperidin-4-yloxy]-7-methoxyquinazoline 525591-34-8P, 5-(1-Allylpiperidin-4-yloxy)-4-(3-chloro-4-fluoroanilino)-7-methoxyquinazoline 525591-35-9P, Methyl 2-[4-[4-(3-chloro-4-fluoroanilino)-7-methoxyquinazolin-5-yloxy]piperidin-1-yl]acetate 525591-36-0P, [[4-[4-(3-Chloro-4-fluoroanilino)-7-methoxyquinazolin-5-yloxy]piperidin-1-yl]methyl] methyl ketone 525591-37-1P, 2-[4-[4-(3-Chloro-4-fluoroanilino)-7-methoxyquinazolin-5-yloxy]piperidin-1-yl]acetamide 525591-38-2P, 4-(3-Chloro-4-fluoroanilino)-5-[1-(methanesulfonyl)piperidin-4-yloxy]-7-methoxyquinazoline 525591-39-3P 525591-41-7P 525591-42-8P 525591-44-0P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(pyrrolidin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-46-2P, 4-(3-Chloro-4-fluoroanilino)-7-(3-piperidinopropoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-47-3P, 4-(3-Chloro-4-fluoroanilino)-7-(3-morpholinopropoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-48-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-methyl-N-(2-propynyl)amino]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-49-5P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(N-methyl-N-allylamino)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-50-8P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(4-hydroxypiperidin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-51-9P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(3-oxopiperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-52-0P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(4-methylpiperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-53-1P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(2-methoxyethyl)piperazin-1-yl]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-54-2P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(N,N-dimethylcarbamoylmethyl)piperazin-1-yl]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-55-3P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(4-allylpiperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-56-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(2-propynyl)piperazin-1-yl]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-57-5P,

4-(3-Chloro-4-fluoroanilino)-7-[3-(4-cyanomethylpiperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-59-7P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-[3-(4-methylpiperazin-1-yl)propoxy]quinazoline 525591-61-1P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-(3-piperidinopropoxy)quinazoline 525591-62-2P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-(3-morpholinopropoxy)quinazoline 525591-63-3P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-[3-[N-(2-methoxyethyl)-N-methylamino]propoxy]quinazoline 525591-64-4P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-[2-(4,4-difluoropiperidin-1-yl)ethoxy]quinazoline 525591-66-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-[3-[N-(2-methoxyethyl)-N-methylamino]propoxy]quinazoline 525591-68-8P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-(3-piperidinopropoxy)quinazoline 525591-69-9P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-[2-(4-methylpiperazin-1-yl)ethoxy]quinazoline 525591-70-2P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-[3-(4-methylpiperazin-1-yl)propoxy]quinazoline 525591-71-3P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-[3-(4-methylpiperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-73-5P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-(3-piperidinopropoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-74-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydrofuran-3-yl)oxy]-7-[2-(4-methylpiperazin-1-yl)ethoxy]quinazoline 525591-76-8P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-(3-morpholinopropoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-77-9P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-(2-morpholinoethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-78-0P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-[2-[N-(2-methoxyethyl)-N-methylamino]ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-79-1P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-(2-piperidinoethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-80-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(4-acetylpiperazin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-81-5P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-(1-methylpiperidin-4-ylmethoxy)quinazoline 525591-82-6P, 4-[1-(2-Cyanobenzyl)indol-5-ylamino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-83-7P, 4-[1-(3-Fluorobenzyl)indol-5-ylamino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-84-8P, 4-[1-(2-Fluorobenzyl)indol-5-ylamino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-85-9P, 4-[[1-(5-Methylisoxazol-3-ylmethyl)indol-5-yl]amino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-86-0P, 4-(1-Benzylindol-5-ylamino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-87-1P, 7-Methoxy-5-(1-methylpiperidin-4-yloxy)-4-[1-(2-pyridylmethyl)indol-5-ylamino]quinazoline 525591-88-2P, 7-Methoxy-5-(1-methylpiperidin-4-yloxy)-4-[[1-(thiazol-4-ylmethyl)indol-5-yl]amino]quinazoline 525591-89-3P, 4-[1-(2,6-Difluorobenzyl)indol-5-ylamino]-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-94-0P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-hydroxyethyl)-N-methylamino]propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-95-1P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(3-hydroxypyrrolidin-1-yl)propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-96-2P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(4-methylpiperazin-1-yl)propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-97-3P, 4-(3-Chloro-4-

fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-(3-piperidinopropoxy)quinazoline 525591-98-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(N-methyl-N-(1-methylpyrrolidin-3-yl)amino)propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525591-99-5P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(2-methoxyethyl)piperazin-1-yl]propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-00-1P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-[3-(pyrrolidin-1-yl)propoxy]quinazoline 525592-01-2P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-(3-morpholinopropoxy)quinazoline 525592-02-3P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(homopiperidin-1-yl)propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-03-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-dimethylaminoethyl)-N-methylamino]propoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-04-5P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(4-methylhomopiperazin-1-yl)propoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-05-6P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-(2-hydroxyethyl)-N-methylamino]ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-06-7P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(3-hydroxypyrrolidin-1-yl)ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-07-8P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(4-methylpiperazin-1-yl)ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-08-9P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-(2-piperidinoethoxy)quinazoline 525592-09-0P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(N-methyl-N-(1-methylpyrrolidin-3-yl)amino)ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-10-3P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[4-(2-methoxyethyl)piperazin-1-yl]ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-11-4P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-[2-(pyrrolidin-1-yl)ethoxy]quinazoline 525592-12-5P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-(2-morpholinoethoxy)quinazoline 525592-13-6P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(homopiperidin-1-yl)ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-14-7P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-(2-dimethylaminoethyl)-N-methylamino]ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-15-8P, 4-(3-Chloro-4-fluoroanilino)-7-(2-(4-methylhomopiperazin-1-yl)ethoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-16-9P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-(2-(4-isopropylpiperazin-1-yl)ethoxy)quinazoline 525592-17-0P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-(2-methoxyethyl)-N-methylamino]ethoxy]-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-18-1P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-[2-[4-(2-morpholinoethyl)piperazin-1-yl]ethoxy]quinazoline 525592-19-2P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-[2-[4-(tetrahydrofuran-2-ylmethyl)piperazin-1-yl]ethoxy]quinazoline 525592-20-5P, 4-(3-Chloro-4-fluoroanilino)-7-(2-(3-dimethylaminopyrrolidin-1-yl)ethoxy)-5-(1-methylpiperidin-4-yloxy)quinazoline 525592-21-6P, 4-(3-Chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)-7-[2-[4-(1-methylpiperidin-4-yl)piperazin-1-yl]ethoxy]quinazoline 525592-22-7P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-hydroxyethyl)-N-methylamino]propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-23-8P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(3-hydroxypyrrolidin-1-yl)propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-24-9P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(4-methylpiperazin-1-yl)propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-25-0P, 4-(3-Chloro-4-fluoroanilino)-7-(3-piperidinopropoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-26-1P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(2-methoxyethyl)piperazin-1-yl]propoxy]-5-[(tetrahydropyran-4-

yl)oxy]quinazoline 525592-27-2P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(pyrrolidin-1-yl)propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-28-3P, 4-(3-Chloro-4-fluoroanilino)-7-(3-morpholinopropoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-29-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-dimethylaminoethyl)-N-methylamino]propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-30-7P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(4-methylhomopiperazin-1-yl)propoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-31-8P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(4-isopropylpiperazin-1-yl)propoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-32-9P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-methoxyethyl)-N-methylamino]propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-33-0P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(2-morpholinoethyl)piperazin-1-yl]propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-34-1P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-[(tetrahydrofuran-2-yl)methyl]piperazin-1-yl]propoxy]-5-(tetrahydropyran-4-yloxy)quinazoline 525592-35-2P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(3-dimethylaminopyrrolidin-1-yl)propoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-36-3P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(1-methylpiperidin-4-yl)piperazin-1-yl]propoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-37-4P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-(2-hydroxyethyl)-N-methylamino]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-38-5P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(4-methylpiperazin-1-yl)ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-39-6P, 4-(3-Chloro-4-fluoroanilino)-7-(2-piperidinoethoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-40-9P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-methyl-N-(1-methylpyrrolidin-3-yl)amino]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-41-0P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[4-(2-methoxyethyl)piperazin-1-yl]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-42-1P
, 4-(3-Chloro-4-fluoroanilino)-7-[2-(homopiperidin-1-yl)ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-43-2P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-(2-dimethylaminoethyl)-N-methylamino]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-44-3P, 4-(3-Chloro-4-fluoroanilino)-7-(2-(4-methylhomopiperazin-1-yl)ethoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-45-4P, 4-(3-Chloro-4-fluoroanilino)-7-(2-(4-isopropylpiperazin-1-yl)ethoxy)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-46-5P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-methyl-N-(2-methoxyethyl)amino]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-50-1P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[4-(2-morpholinoethyl)piperazin-1-yl]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-51-2P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[4-[(tetrahydrofuran-2-yl)methyl]piperazin-1-yl]ethoxy]-5-(tetrahydropyran-4-yloxy)quinazoline 525592-52-3P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(3-dimethylaminopyrrolidin-1-yl)ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-53-4P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[4-(1-methylpiperidin-4-yl)piperazin-1-yl]ethoxy]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525592-54-5P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-hydroxyethyl)-N-methylamino]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-55-6P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(3-hydroxypyrrolidin-1-yl)propoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-56-7P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(homopiperidin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-57-8P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-dimethylaminoethyl)-N-methylamino]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline

525592-58-9P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(4-methylhomopiperazin-1-yl)propoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-59-0P, 4-(3-Chloro-4-fluoroanilino)-7-(3-(4-isopropylpiperazin-1-yl)propoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-60-3P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[N-(2-methoxyethyl)-N-methylamino]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-61-4P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(2-morpholinoethyl)piperazin-1-yl]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-62-5P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-[(tetrahydrofuran-2-yl)methyl]piperazin-1-yl]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-63-6P, 4-(3-Chloro-4-fluoroanilino)-7-[3-(3-dimethylaminopyrrolidin-1-yl)propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-64-7P, 4-(3-Chloro-4-fluoroanilino)-7-[3-[4-(1-methylpiperidin-4-yl)piperazin-1-yl]propoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-65-8P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[N-(2-hydroxyethyl)-N-methylamino]ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-66-9P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(3-hydroxypyrrolidin-1-yl)ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-67-0P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(4-methylpiperazin-1-yl)ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-68-1P, 4-(3-Chloro-4-fluoroanilino)-7-(2-piperidinoethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-69-2P, 4-(3-Chloro-4-fluoroanilino)-7-[2-[4-(2-methoxyethyl)piperazin-1-yl]ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-70-5P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(pyrrolidin-1-yl)ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-71-6P, 4-(3-Chloro-4-fluoroanilino)-7-(2-morpholinoethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-72-7P, 4-(3-Chloro-4-fluoroanilino)-7-[2-(homopiperidin-1-yl)ethoxy]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-73-8P, 4-(3-Chloro-4-fluoroanilino)-7-(2-(4-methylhomopiperazin-1-yl)ethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-74-9P, 4-(3-Chloro-4-fluoroanilino)-7-(2-(4-isopropylpiperazin-1-yl)ethoxy)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-75-0P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-(pyrrolidin-1-yl)propoxy]quinazoline 525592-76-1P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-(3-morpholinopropoxy)quinazoline 525592-77-2P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-(homopiperidin-1-yl)propoxy]quinazoline 525592-78-3P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-(3-(4-methylhomopiperazin-1-yl)propoxy)quinazoline 525592-79-4P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-(4-isopropylpiperazin-1-yl)propoxy]quinazoline 525592-80-7P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-[N-(2-methoxyethyl)-N-methylamino]propoxy]quinazoline 525592-81-8P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-(4-(2-morpholinoethyl)piperazin-1-yl)propoxy]quinazoline 525592-82-9P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-[4-[(tetrahydrofuran-2-yl)methyl]piperazin-1-yl]propoxy]quinazoline 525592-83-0P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-(3-dimethylaminopyrrolidin-1-yl)propoxy]quinazoline 525592-84-1P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[3-[4-(1-methylpiperidin-4-yl)piperazin-1-yl]propoxy]quinazoline 525592-85-2P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(N-(2-hydroxyethyl)-N-methylamino)ethoxy]quinazoline 525592-86-3P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(3-hydroxypyrrolidin-1-yl)ethoxy]quinazoline 525592-87-4P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-(2-(4-methylpiperazin-1-yl)ethoxy)quinazoline 525592-88-5P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-(2-

piperidinoethoxy)quinazoline 525592-89-6P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(4-(2-methoxyethyl)piperazin-1-yl)ethoxy]quinazoline 525592-90-9P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(homopiperidin-1-yl)ethoxy]quinazoline 525592-91-0P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(4-methylhomopiperazin-1-yl)ethoxy]quinazoline 525592-92-1P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-[4-(2-morpholinoethyl)piperazin-1-yl]ethoxy]quinazoline 525592-93-2P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-[4-[(tetrahydrofuran-2-yl)methyl]piperazin-1-yl]ethoxy]quinazoline 525592-94-3P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(3-dimethylaminopyrrolidin-1-yl)ethoxy]quinazoline 525592-95-4P, 4-(3-Chloro-4-fluoroanilino)-5-cyclopentyloxy-7-[2-(4-(1-methylpiperidin-4-yl)piperazin-1-yl)ethoxy]quinazoline 525593-38-8P, 4-(3-Chloroanilino)-7-(3-(R)-dimethylaminopyrrolidin-1-yl)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-39-9P, 4-(3-Chloroindol-5-ylamino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-40-2P, 4-(3-Bromoanilino)-7-(3-(R)-dimethylaminopyrrolidin-1-yl)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-41-3P, 4-(3-Bromoindol-5-ylamino)-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antitumor agent; preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 7147-14-0P, 5-Nitroindole-3-carbonitrile 21544-81-0P, 4,6-Dimethoxyisatin 21577-57-1P, 2-Amino-4,6-dimethoxybenzoic acid 29683-23-6P, 4-Hydroxytetrahydrothiopyran 41330-49-8P, 5-Amino-3-chloroindazole 61861-88-9P, 3-Methyl-5-nitroindole 73437-03-3P, 5-Amino-3-methylbenzisothiazole 102308-52-1P, 3-Methylindol-5-ylamine 123855-51-6P, 1-(tert-Butoxycarbonyl)-4-hydroxymethylpiperidine 126674-77-9P, 2-Amino-4,6-difluorobenzoic acid 126674-93-9P, 4,6-Difluoroisatin 133303-91-0P 142851-03-4P, Ethyl 1-(tert-butoxycarbonyl)piperidine-4-carboxylate 156450-03-2P, N-tert-Butoxycarbonyl-3,5-dibenzyloxyaniline 159768-57-7P, 5-Aminoindole-3-carbonitrile 166815-96-9P, N-(tert-Butoxycarbonyl)-4-(tosyloxymethyl)piperidine 196207-16-6P, 4,6-Di(benzyloxy)isatin 202197-26-0P, 3-Chloro-4-(3-fluorobenzyloxy)aniline 282104-36-3P, 1-(2-Chloro-4-nitrobenzoyl)azepane 379228-26-9P, Methyl 2-amino-4,6-dimethoxybenzoate 379228-27-0P, 3,4-Dihydro-5,7-dimethoxyquinazolin-4-one 379228-31-6P, 2-Amino-4,6-dibenzyloxybenzoic acid 379228-32-7P, Methyl 2-amino-4,6-dibenzyloxybenzoate 379228-33-8P, 5,7-Dibenzyloxy-3,4-dihydroquinazolin-4-one 379228-48-5P, 4-Chloro-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazoline 379228-50-9P, 3,4-Dihydro-5-hydroxy-7-methoxyquinazolin-4-one 379228-51-0P, 5-Hydroxy-7-methoxy-3-pivaloyloxymethylquinazolin-4-one 379228-52-1P, 7-Methoxy-5-(1-methylpiperidin-4-yloxy)-3-pivaloyloxymethyl-3,4-dihydroquinazolin-4-one 379228-53-2P, 3,4-Dihydro-7-methoxy-5-(1-methylpiperidin-4-yloxy)quinazolin-4-one 379228-57-6P, Methyl 2-amino-4,6-difluorobenzoate 379228-58-7P, 5,7-Difluoro-3,4-dihydroquinazolin-4-one 379228-59-8P, 7-Fluoro-5-[(tetrahydropyran-4-yl)oxy]-3,4-dihydroquinazolin-4-one 379229-60-4P, 7-Benzyloxy-3,4-dihydro-5-hydroxyquinazolin-4-one 379229-61-5P, 7-Benzyloxy-5-hydroxy-3-pivaloyloxymethyl-3,4-dihydroquinazolin-4-one 379229-70-6P, 7-Methoxy-5-[(tetrahydropyran-4-yl)oxy]-3,4-dihydroquinazolin-4-one 379229-88-6P, 7-Benzyloxy-3,4-dihydro-5-[(tetrahydropyran-4-yl)oxy]quinazolin-4-one 379230-15-6P, 5-(1-tert-Butoxycarbonylpiperidin-

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cyclopentyloxyquinazoline 525592-96-5P, 5-Benzyloxy-3,4-dihydro-7-fluoroquinazolin-4-one 525592-99-8P 525593-00-4P, 4-(3-Chloro-4-fluoroanilino)-5,7-dimethoxyquinazoline 525593-01-5P, 3,4-Dihydro-5-hydroxy-7-(3-(R)-dimethylaminopyrrolidin-1-yl)quinazolin-4-one 525593-02-6P, 7-(3-(R)-Dimethylaminopyrrolidin-1-yl)-5-hydroxy-3-pivaloyloxymethyl-3,4-dihydroquinazolin-4-one 525593-03-7P, 7-(3-(R)-Dimethylaminopyrrolidin-1-yl)-5-(1-methylpiperidin-4-yloxy)-3-pivaloyloxymethyl-3,4-dihydroquinazolin-4-one 525593-04-8P, 7-Methoxy-3-pivaloyloxymethyl-5-[(tetrahydrofuran-3-yl)oxy]-3,4-dihydroquinazolin-4-one 525593-05-9P, 7-Methoxy-3-pivaloyloxymethyl-5-[(tetrahydropyran-4-yl)oxy]-3,4-dihydroquinazolin-4-one 525593-06-0P, 7-Benzyloxy-3-pivaloyloxymethyl-5-[(tetrahydropyran-4-yl)oxy]-3,4-dihydroquinazolin-4-one 525593-07-1P, 7-Benzyloxy-5-(1-methylpiperidin-4-yloxy)-3-pivaloyloxymethyl-3,4-dihydroquinazolin-4-one 525593-08-2P, 7-Benzyloxy-3-pivaloyloxymethyl-5-[(tetrahydrofuran-3-yl)oxy]-3,4-dihydroquinazolin-4-one 525593-09-3P, 7-Benzyloxy-5-cyclopentyloxy-3-pivaloyloxymethyl-3,4-dihydroquinazolin-4-one 525593-10-6P, 7-Benzyloxy-3,4-dihydro-5-[(tetrahydrofuran-3-yl)oxy]quinazolin-4-one 525593-11-7P, 7-Benzyloxy-5-cyclopentyloxy-3,4-dihydroquinazolin-4-one 525593-12-8P 525593-13-9P, 7-Benzyloxy-4-(3-chloro-4-fluoroanilino)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525593-14-0P, 7-Benzyloxy-4-(3-bromoanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-15-1P, 7-Benzyloxy-4-(3-chloro-4-fluoroanilino)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525593-16-2P, 7-Benzyloxy-4-(3-chloro-4-fluoroanilino)-5-cyclopentyloxyquinazoline 525593-17-3P, 7-Benzyloxy-4-(3-chloro-4-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-18-4P, 7-Benzyloxy-4-(3-methylanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-19-5P, 7-Benzyloxy-4-(3-chloroanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-20-8P, 7-Benzyloxy-4-[3-chloro-4-(3-fluorobenzyloxy)anilino]-5-cyclopentyloxyquinazoline 525593-22-0P, 7-Benzyloxy-4-[3-chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 525593-23-1P, 7-Benzyloxy-4-[3-chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 525593-24-2P, 7-Benzyloxy-4-[3-chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525593-26-4P 525593-28-6P 525593-29-7P 525593-30-0P 525593-31-1P 525593-32-2P 525593-33-3P, 3-Bromo-5-nitroindole 525593-36-6P, Allyl(2-bromo-4-nitrophenyl)amine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 60-56-0, 2-Mercapto-1-methylimidazole 78-95-5, Chloromethyl methyl ketone 96-34-4, Methyl chloroacetate 96-41-3, Cyclopentanol 106-52-5, 4-Hydroxy-1-methylpiperidine 106-95-6, Allyl bromide, reactions 106-96-7, Propargyl bromide 108-42-9, 3-Chloroaniline 108-44-1, reactions 109-01-3, 1-Methylpiperazine 109-70-6, 1-Bromo-3-chloropropane 109-83-1, N-(2-Hydroxyethyl)-N-methylamine 109-86-4, 2-Methoxyethanol 110-85-0, Piperazine, reactions 110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions 111-49-9, Homopiperidine 123-38-6, Propionaldehyde, reactions 123-75-1, Pyrrolidine, reactions 142-25-6, N,N,N'-Trimethylethylenediamine 345-35-7, 2-Fluorobenzyl chloride 367-21-5, 3-Chloro-4-fluoroaniline 369-34-6, 3,4-Difluoronitrobenzene 372-19-0, 3-Fluoroaniline 372-39-4, 3,5-Difluoroaniline 436-72-6, 5-Fluoro-3,4-dihydroquinazolin-4-one 446-48-0, 2-Fluorobenzyl bromide 453-20-3, 3-Hydroxytetrahydrofuran

456-41-7, 3-Fluorobenzyl bromide 456-42-8, 3-Fluorobenzyl chloride 591-19-5, 3-Bromoaniline 612-13-5, 2-Chloromethylbenzonitrile 619-08-9, 2-Chloro-4-nitrophenol 627-37-2, N-Methyl-N-allylamine 697-73-4, 2,6-Difluorobenzyl chloride 1066-54-2, Trimethylsilylacetylene 1072-72-6, Tetrahydrothiopyran-4-one 1126-09-6, Ethyl 4-piperidinecarboxylate 2081-44-9, 4-Hydroxytetrahydropyran 2516-96-3, 2-Chloro-5-nitrobenzoic acid 3334-05-2, 3-Hydroxytetrahydrothiophene 3364-76-9, 4-Chloromethylthiazole 3554-74-3, 3-Hydroxy-1-methylpiperidine 3886-69-9, (R)-α-Methylbenzylamine 3964-52-1, 4-Amino-2-chlorophenol 4318-37-0, 1-Methylhomopiperazine 4318-42-7, 1-Isopropylpiperazine 4377-33-7, 2-Picolyl chloride 4812-45-7, 3-Chloro-5-nitroindazole 4892-89-1, 1-(2-Morpholinoethyl)piperazine 5192-03-0, 5-Aminoindole 5382-16-1, 4-Hydroxypiperidine 5625-67-2, Piperazin-2-one 6146-52-7, 5-Nitroindole 6482-24-2, 2-Bromoethyl methyl ether 6959-47-3, 2-Picolyl chloride hydrochloride 10312-83-1, 2-Methoxyacetaldehyde 10445-91-7, 4-Picolyl chloride 13156-06-4, 3-Hydroxy-1-isopropylazetidine 13220-33-2, 3-Hydroxy-1-methylpyrrolidine 13296-94-1, 2-Bromo-4-nitroaniline 13484-40-7, 1-(2-Methoxyethyl)piperazine 13961-36-9, 1-Allylpiperazine 18997-19-8, Chloromethyl pivalate 19335-11-6, 5-Aminoindazole 21987-29-1, 4,4-Difluoropiperidine 23995-88-2, 1-(1-Methylpiperidin-4-yl)piperazine 24424-99-5, Di-tert-butyl dicarbonate 25915-79-1, 4-Aminocresol 28917-43-3, 3,5-Dibenzyloxybenzoic acid 35161-71-8, N-Methyl-N-propargylamine 35166-37-1, 3-Chloromethyl-5-methylisoxazole 35272-19-6, 3-Methyl-5-nitrobenzisothiazole 38256-93-8, N-(2-Methoxyethyl)-N-methylamine 39890-43-2, 1-(N,N-Dimethylcarbamoylmethyl)piperazine 40499-83-0, 3-Hydroxypyrrolidine 40891-33-6, 3,5-Dimethoxyaniline hydrochloride 52070-67-4, 1-(2-Propynyl)piperazine 54060-30-9, 3-Ethynylaniline 54845-09-9, 3,5-Dibenzyloxyaniline hydrochloride 58619-56-0, 1-Cyanomethylpiperazine 64021-83-6, N-(1-Methylpyrrolidin-3-yl)-N-methylamine 67400-25-3, 3-Bromo-5-nitroindazole 69478-75-7, 3-Dimethylaminopyrrolidine 82500-35-4, 1-(Tetrahydrofuran-2-ylmethyl)piperazine 89487-91-2, 4-Hydroxy-3-iodonitrobenzene 109384-19-2, 1-tert-Butoxycarbonyl-4-hydroxypiperidine 132883-44-4, 3-(S)-Dimethylaminopyrrolidine 132958-72-6, 3-(R)-(+)-Dimethylaminopyrrolidine 141699-55-0, 1-tert-Butoxycarbonylazetidin-3-ol 364794-21-8, 3-Methyl-4-(2-pyridylmethoxy)aniline 524955-71-3, 5-[[1-(tert-Butoxycarbonyl)piperidin-4-yl]oxy]-3,4-dihydroquinazoline 525590-99-2, 4-(3-Chloro-4-fluoroanilino)-7-hydroxy-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525591-12-2, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)-7-hydroxyquinazoline 525591-15-5, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]-7-hydroxyquinazoline 525591-17-7, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-7-hydroxy-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 525592-97-6, 5,7-Difluoro-3,4-dihydroquinazoline 525593-21-9, 7-Benzyloxy-5-cyclopentyl-3,4-dihydroquinazolin-4-one
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of (anilino)quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

L13 ANSWER 3 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 138:385441 MARPAT
TITLE: Preparation of quinazolines as antitumor agents
INVENTOR(S): Hennequin, Laurent Francois Andre; Kettle, Jason Grant; Pass, Martin; Bradbury, Robert Hugh

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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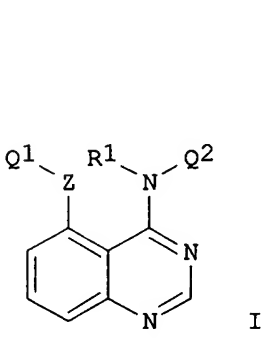

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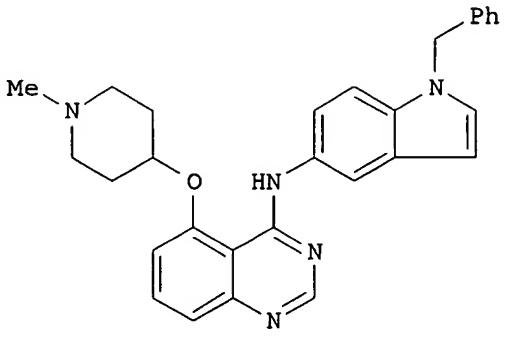

II

AB Anilino-, indolylamino-, and benzopyrazolylamino-substituted quinazolines I [wherein R1, R2, R3, and R6 = independently H or alkyl; Z = a bond, O, S, or NR2; Q1 = (un)substituted cycloalkyl(alkyl), cycloalkyl(alkenyl), cycloalkyl(alkynyl), or heterocyclyl(alkyl); with the proviso that alkylene chains within Q1Z are optionally interrupted by O, S, SO, SO2, NR3, CO, CHOR3, CONR3, NR3CO, SO2NR3, NR3SO2, CH=CH, or C.tplbond.C; Q2 = (un)substituted C6H4-4-X2Q2, 1-(X3Q4)indol-5-yl, 1-(X3Q4)-indol-6-yl, 1-(X3Q4)-1H-benzopyrazol-5-yl, or 1-(X3Q4)-1H-benzopyrazol-6-yl; X2 = a bond, O, S, SO, SO2, NR6, CHOR6, CONR6, NR6CO, SO2NR6, NR6SO2, OC(R6)2,

C(R6)2O, SC(R6)2, C(R6)2S, CO, C(R6)2NR6, or NR6C (R6)2; or X2Q3 = heterocyclylcarbonyl; X3 = a bond, SO2, CO, SO2NR7, or C(R7)2; Q3 and Q4 = independently (un)substituted (heteroaryl); and pharmaceutically acceptable salts thereof] were prepared for use in the prevention or treatment of tumors which are sensitive to inhibition of erbB receptor tyrosine kinases. For example, coupling of 4-hydroxy-1-methylpiperidine with 5-fluoro-3,4-dihydroquinazolin-4-one using NaH in DMA gave the ether (91%). Reaction with POCl3 and di-isopropylethylamine in DCM provided 4-chloro-5-(1-methylpiperidin-4-yloxy)quinazoline (62%), which was coupled with 5-amino-1-benzylindole in the presence of IPA containing HCl in ether to afford II•HCl (46%). The biol. activity of the example compds. was assessed in five assays. Thus, I inhibited the phosphorylation of a tyrosine-containing polypeptide substrate by epidermal growth factor receptor (EGFR) kinase, erbB2 kinase, and erbB4 kinase with IC50 values in the range of 0.001 μM - 10 μM. I also inhibited the proliferation of both human naso-pharyngeal carcinoma KB cells and non-neoplastic epithelial H16N-2 cells with IC50 values in the range 0.001 μM - 20 μM. In addition, I inhibited the growth of colorectal adenocarcinoma LoVo and human mammary carcinoma BT-474 tumor cell xenografts in vivo with activities in the range of 1 mg/kg/day to 200 mg/kg/day with no physiol. unacceptable toxicity at the ED.

IC ICM C07D239-94
ICS C07D401-14; C07D401-12; C07D409-12; C07D403-12; C07D417-14; C07D413-14; C07D409-14; A61K031-505; A61P035-00

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST anilino indolylamino benzopyrazolylamino quinazoline prepn antitumor agent; quinazoline prepn erbB receptor tyrosine kinase inhibitor antitumor agent

IT Growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(heregulin, ErbB-4; preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT Antitumor agents
Human
Neoplasm
Phosphorylation, biological
(preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT Epidermal growth factor receptors
neu (receptor)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 524953-85-3P, 5-[1-(tert-Butoxycarbonyl)piperidin-4-yloxy]-4-[3-chloro-4-(3-fluorobenzyloxy)anilino]quinazoline 524954-44-7P, 4-[3-Chloro-4-[(3-fluorobenzyl)oxy]anilino]-5-(piperidin-4-yloxy)quinazoline 524955-20-2P, 4-[4-[(1-tert-Butoxycarbonylmethyl-1H-imidazol-2-yl)thio]-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)
(antitumor agent; preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 524953-51-3P, 4-(1-Benzylindol-5-ylamino)-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-53-5P, 4-(3-Chloro-4-phenoxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-54-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-55-7P, 5-(1-Methylpiperidin-4-yloxy)-4-(4-phenoxyanilino)quinazoline hydrochloride 524953-56-8P, 5-(1-Methylpiperidin-4-yloxy)-4-[4-(phenylthio)anilino]quinazoline hydrochloride 524953-57-9P, 4-[1-(Benzenesulfonyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-58-0P, 4-[3-Chloro-4-(3-pyridyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-59-1P, 4-[3-Chloro-4-(3-fluorophenoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-61-5P, 4-[3-Chloro-4-(2,3-difluorophenoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-63-7P, 4-[3-Chloro-4-(2-pyrimidinyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-64-8P, 4-[3-Chloro-4-(2-thenoyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-65-9P, 4-[3-Chloro-4-[(1-methyl-1H-imidazol-2-yl)methoxy]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-66-0P, 4-[3-Chloro-4-[(2-pyridylmethyl)amino]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-68-2P, 5-(1-Methylpiperidin-4-yloxy)-4-[3-methyl-4-[(2-pyridylmethyl)amino]anilino]quinazoline hydrochloride 524953-70-6P, 4-[3-Chloro-4-[N-methyl-N-(2-pyridyl)amino]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-72-8P, 4-[3-Chloro-4-(2-pyridylamino)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-74-0P, 5-(1-Methylpiperidin-4-yloxy)-4-[3-methyl-4-(2-pyridylamino)anilino]quinazoline hydrochloride 524953-76-2P, 4-[3-Methyl-4-[N-methyl-N-(2-pyridyl)amino]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-78-4P, 4-[3-Chloro-4-[(3-fluorophenylamino)methyl]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-80-8P, 4-[3-Chloro-4-(8-quinolylthio)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524953-82-0P, 4-[3-Chloro-4-[(1-methyl-1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-83-1P, 4-[3-Chloro-4-(2-pyridyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-84-2P, 5-(1-Methylpiperidin-4-yloxy)-4-[3-methyl-4-(2-pyridylmethoxy)anilino]quinazoline 524953-86-4P, 4-[3-Chloro-4-(1,5-dimethylpyrazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-88-6P, 4-[3-Chloro-4-(1-methylpyrazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-90-0P, 4-[3-Chloro-4-[(3-methylisoxazol-5-yl)methoxy]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-92-2P, 4-[4-(Azepan-1-ylcarbonyl)-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-95-5P, 4-[1-(3-Fluorobenzyl)indazol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-97-7P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 524953-99-9P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpyrrolidin-3-yloxy)quinazoline 524954-00-5P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 524954-01-6P, 4-[4-(2-Bromobenzyloxy)-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-03-8P, 4-[3-Chloro-4-([1,2,5]thiadiazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-

yloxy)quinazoline 524954-04-9P, 4-(4-Benzyloxy-3-fluoroanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-06-1P, 4-[3-Fluoro-4-(2-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-07-2P, 4-[4-(2,6-Difluorobenzyloxy)-3-fluoroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-08-3P, 4-[4-(2-Cyanobenzyloxy)-3-fluoroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-09-4P, 4-[3-Fluoro-4-(2-pyridylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-10-7P, 4-[3-Fluoro-4-(5-methylisoxazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-11-8P, 4-[3-Chloro-4-(3,4-difluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-12-9P, 4-[3-Chloro-4-(isoxazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-13-0P, 4-[3-Chloro-4-(5-methylisoxazol-3-ylmethoxy)anilino]-5-(tetrahydropyran-4-yloxy)quinazoline 524954-15-2P, 4-[3-Chloro-4-(2-pyrazinylmethoxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 524954-16-3P, 4-[3-Chloro-4-(5-methylisoxazol-3-yl)anilino]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 524954-18-5P, 4-[3-Chloro-4-(2-morpholinothiazol-4-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-20-9P, 4-(4-Benzyloxy-3-methylanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-22-1P, 4-[4-(2-Fluorobenzyloxy)-3-methylanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-23-2P, 4-[4-(2,6-Difluorobenzyloxy)-3-methylanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-24-3P, 4-[3-Methyl-4-(5-methylisoxazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-25-4P, 5-(1-Methylpiperidin-4-yloxy)-4-[3-methyl-4-(thiazol-4-ylmethoxy)anilino]quinazoline 524954-26-5P, 4-[4-(2-Cyanobenzyloxy)-3-methylanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-27-6P, 4-[4-(3-Fluorobenzyloxy)-3-methylanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-28-7P, 4-[3-Fluoro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-30-1P, 4-[3-Chloro-4-(2-methyloxazol-4-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-31-2P, 4-[5-Chloro-2-fluoro-4-(2-pyridylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-35-6P, 4-[3-Chloro-4-(decahydroquinolin-1-ylcarbonyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-38-9P, 4-[3-Chloro-4-(decahydroisoquinolin-2-ylcarbonyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-39-0P, 4-[3-Chloro-4-(3-methylpiperidin-1-ylcarbonyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-40-3P, 4-[3-Chloro-4-(4-methylpiperidin-1-ylcarbonyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-41-4P, 4-[3-Ethynyl-4-(decahydroquinolin-1-ylcarbonyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-43-6P, 4-[3-Ethynyl-4-(homopiperidin-1-ylcarbonyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-45-8P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-propylpiperidin-4-yloxy)quinazoline 524954-46-9P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-allylpiperidin-4-yloxy)quinazoline 524954-47-0P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[[1-(2-propynyl)piperidin-4-yl]oxy]quinazoline 524954-48-1P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[[1-(2-methoxyethyl)piperidin-4-yl]oxy]quinazoline 524954-49-2P, 1-[4-[4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]quinazolin-5-yloxy]piperidin-1-yl]acetone 524954-50-5P, Methyl 2-[4-[4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]quinazolin-5-yloxy]piperidin-1-yl]acetate 524954-51-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[[1-(methanesulfonyl)piperidin-4-yl]oxy]quinazoline 524954-52-7P, 2-[4-[4-[3-Chloro-4-(3-

fluorobenzyloxy)anilino]quinazolin-5-yloxy]piperidin-1-yl]acetamide 524954-53-8P, 4-[1-(5-Methylisoxazol-3-ylmethyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-55-0P, 4-[1-(2,6-Difluorobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-56-1P, 4-[1-(2-Cyanobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-57-2P, 5-(1-Methylpiperidin-4-yloxy)-4-[1-(2-pyridylmethyl)indol-5-ylamino]quinazoline 524954-58-3P, 5-(1-Methylpiperidin-4-yloxy)-4-[[1-(thiazol-4-ylmethyl)indol-5-yl]amino]quinazoline 524954-59-4P, 4-[1-(4-Fluorobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-60-7P, 4-[1-(2-Methoxybenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-61-8P, 4-[1-(2-Chlorobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-62-9P, 4-[1-(2,5-Dimethylbenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-63-0P, 4-[1-(3-Chlorobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-64-1P, 5-(1-Methylpiperidin-4-yloxy)-4-[[1-(2-methylthiazol-4-ylmethyl)indol-5-yl]amino]quinazoline 524954-65-2P, 4-[1-(2-Fluorobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-66-3P, 4-[1-(3-Fluorobenzyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-67-4P, 4-(4-Benzyloxy-3-ethynylanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-69-6P, 4-[3-Ethynyl-4-(2-fluorobenzyloxy)anilino]-5-[(1-methylpiperidin-4-yl)oxy]quinazoline hydrochloride 524954-71-0P, 4-[3-Ethynyl-4-(3-fluorobenzyloxy)anilino]-5-[(1-methylpiperidin-4-yl)oxy]quinazoline hydrochloride 524954-73-2P, 4-[3-Ethynyl-4-(2,6-difluorobenzyloxy)anilino]-5-[(1-methylpiperidin-4-yl)oxy]quinazoline hydrochloride 524954-75-4P, 4-[3-Ethynyl-4-(5-methylisoxazol-3-ylmethoxy)anilino]-5-[(1-methylpiperidin-4-yl)oxy]quinazoline hydrochloride 524954-77-6P, 4-[3-Ethynyl-4-(thiazol-4-ylmethoxy)anilino]-5-[(1-methylpiperidin-4-yl)oxy]quinazoline hydrochloride 524954-79-8P, 4-[3-Chloro-4-(2-pyrimidinylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-81-2P, 4-[4-(2-Aminothiazol-4-ylmethoxy)-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-83-4P, 4-[3-Fluoro-4-[(1-methyl-1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-85-6P, 4-[3-Fluoro-4-[(1-methyl-1H-1,3,4-triazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-87-8P, 4-[3-Chloro-4-(2-pyridylthio)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-89-0P, 4-[3-Chloro-4-(2-pyrimidinylthio)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-91-4P, 4-[3-Chloro-4-[(1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-93-6P, 4-[3-Fluoro-4-[(1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-95-8P, 4-[3-Chloro-4-(2-thiazolylthio)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-96-9P, 4-[3-Chloro-4-(2-pyrazinylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-97-0P, 4-[3-Chloro-4-(4-pyrimidinylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-98-1P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-99-2P, 4-[3-Chloro-4-[(imidazo[1,2-a]pyridin-2-yl)methoxy]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-00-8P, 4-[4-[(Benzo[d]isoxazol-3-yl)methoxy]-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-01-9P, 4-[3-Chloro-4-(2-pyrimidinyloxy)anilino]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 524955-02-0P, 4-[3-Chloro-4-([1,2,4]oxadiazol-3-ylmethoxy)anilino]-5-(1-

methylpiperidin-4-yloxy)quinazoline 524955-04-2P, 4-[3-Chloro-4-(5-methyl-1,2,4-oxadiazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-05-3P, 4-[4-(5-Amino-1,3,4-oxadiazol-2-ylmethoxy)-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-07-5P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 524955-10-0P, 4-[1-(3-Fluorobenzyl)indazol-5-ylamino]-5-[(tetrahydropyran-4-yl)oxy]quinazoline 524955-11-1P, 4-[3-Chloro-4-[(1H-imidazol-2-yl)thio]anilino]-5-(tetrahydropyran-4-yloxy)quinazoline 524955-12-2P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 524955-14-4P, 4-[3-Chloro-4-[[1-(cyanomethyl)-1H-imidazol-2-yl]thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-16-6P, 4-[4-[[1-(Carbamoylmethyl)-1H-imidazol-2-yl]thio]-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-17-7P, 4-[3-Chloro-4-[[1-(2-methoxyethyl)-1H-imidazol-2-yl]thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-18-8P, 4-[3-Chloro-4-[[1-(N,N-diethylcarbamoylmethyl)-1H-imidazol-2-yl]thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-21-3P, 4-[3-Chloro-4-[(1-difluoromethyl-1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-22-4P, 4-[4-[[1-(Cyanomethyl)-1H-imidazol-2-yl]thio]-3-fluoroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-24-6P, 4-[4-[[1-(Carboxymethyl)-1H-imidazol-2-yl]thio]-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline dihydrochloride 524955-25-7P, 5-(1-Methylpiperidin-4-yloxy)-4-[4-(thiazol-2-ylthio)anilino]quinazoline 524955-27-9P, 5-(1-Methylpiperidin-4-yloxy)-4-[4-(2-thiazolylsulfonyl)anilino]quinazoline 524955-28-0P, 4-[3-Chloro-4-(3-fluorobenzyloxy)aniline]-5-[[1-(4-methylpiperazin-1-yl)cyclohex-4-yl]oxy]quinazoline 524955-31-5P, 4-[3-Chloro-4-(1,2,3-thiadiazol-4-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-32-6P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-(2-piperidinoethoxy)quinazoline 524955-34-8P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-(1-methylpiperidin-2-ylmethoxy)quinazoline 524955-35-9P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-[2-(azepan-1-yl)ethoxy]quinazoline 524955-36-0P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-(2-morpholinoethoxy)quinazoline 524955-37-1P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-(2-pyrrolidinoethoxy)quinazoline 524955-38-2P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-(3-morpholinopropoxy)quinazoline 524955-39-3P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-[3-(4-methylpiperazin-1-yl)propoxy]quinazoline 524955-40-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-2-ylmethoxy)quinazoline 524955-41-7P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(2-pyrrolidinoethoxy)quinazoline 524955-42-8P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(3-morpholinopropoxy)quinazoline 524955-43-9P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[2-(1-methylpyrrolidin-2-yl)ethoxy]quinazoline 524955-44-0P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(2-morpholinoethoxy)quinazoline 524955-45-1P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[3-(4-methylpiperazin-1-yl)propoxy]quinazoline 524955-46-2P, 4-[3-Chloro-4-(2,6-dichlorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-47-3P, 4-[3-Chloro-4-(4-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-48-4P, 4-[3-Chloro-4-(3-nitrobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-49-5P, 4-[3-Chloro-4-(3-pyridylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-50-8P, 4-[4-(Benzo[1,3]dioxol-5-ylmethoxy)-3-chloroanilino]-5-(1-

methylpiperidin-4-yloxy)quinazoline 524955-51-9P, 4-[3-Chloro-4-(2-methoxybenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-52-0P, 4-[3-Chloro-4-(5-methylisoxazol-3-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-53-1P, 4-[3-Chloro-4-(2-chlorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-54-2P, 4-[3-Chloro-4-(2-chloro-6-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-55-3P, 4-[3-Chloro-4-(2,5-dimethylbenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-56-4P, 4-[3-Chloro-4-(3-methoxybenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-57-5P, 4-[3-Chloro-4-(2-nitrobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-58-6P, 4-[3-Chloro-4-(4-pyridylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-59-7P, 4-[3-Chloro-4-(2,6-difluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-60-0P, 4-[3-Chloro-4-(2-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-61-1P, 4-[3-Chloro-4-(3-chlorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-62-2P, 4-[3-Chloro-4-(3-methylbenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-63-3P, 4-[3-Chloro-4-(5-chlorothiophen-2-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-64-4P, 4-[3-Chloro-4-(2-cyanobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-65-5P, 4-[3-Chloro-4-(2-methylthiazol-4-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-66-6P, 4-[3-Chloro-4-(4-methyl-2-nitrobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-67-7P, 4-[3-Chloro-4-(thiazol-4-ylmethoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-68-8P, 4-[3-Chloro-4-[(6-chloro-3-pyridyl)methoxy]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-20-5P, 4-(3-Chloro-4-phenoxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-21-6P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-22-7P, 4-(1-Benzylindol-5-ylamino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-23-8P, 4-[1-(Benzenesulfonyl)indol-5-ylamino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-24-9P, 4-[3-Chloro-4-(3-fluorophenoxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-25-0P, 4-[3-Chloro-4-(2-thienoyl)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-26-1P, 4-[3-Ethynyl-4-(3-fluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-27-2P, 4-[3-Ethynyl-4-(2,6-difluorobenzyloxy)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524956-28-3P, 4-[4-[(2-Aminothiazol-4-yl)methoxy]-3-chloroanilino]-5-(1-methylpiperidin-4-yloxy)quinazoline
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antitumor agent; preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

IT 1004-96-2P, 3-Methylisoxazole-5-carboxylic acid methyl ester 3209-70-9P, 3-Ethoxycarbonylisoxazole 5335-29-5P, 3-Chloro-4-phenoxyaniline 14716-89-3P, 5-(Hydroxymethyl)-3-methylisoxazole 25935-36-8P, 3-Chloro-1-nitro-4-(3-pyridyloxy)benzene 25935-37-9P 26807-73-8P, 5-Amino-1-benzyl-1H-indole 42839-09-8P, Pyrimidine-2-methanol 56966-69-9P 57684-71-6P, 3-Chloromethylisoxazole 65795-95-1P, 1-Benzyl-5-nitroindole 75294-49-4P, tert-Butyl 4-amino-2-chlorobenzoate 84547-62-6P, 1-Methyl-3-hydroxymethylpyrazole 89102-73-8P, 3-Hydroxymethylisoxazole 124400-51-7P, 1-Benzenesulfonyl-5-nitroindole 124400-52-8P, 5-Amino-1-(benzenesulfonyl)indole 133303-91-0P,

3-Fluoro-4-[(1-methyl-1H-imidazol-2-yl)thio]nitrobenzene 141567-54-6P, Methanesulfonic acid 2-methyloxazol-4-ylmethyl ester 147696-61-5P, 4-(Thiazol-2-ylsulfonyl)aniline 147696-62-6P, 4-(Thiazol-2-ylsulfonyl)nitrobenzene 147696-63-7P, 4-(2-Thiazolylthio)nitrobenzene 153912-60-8P, 1,5-Dimethyl-3-hydroxymethylpyrazole 176641-88-6P, 3-Chloro-4-(2-pyridylamino)nitrobenzene 179687-71-9P, 3-Chloro-4-[(1H-imidazol-2-yl)thio]nitrobenzene 179687-74-2P, 3-Chloro-4-(2-thiazolylthio)nitrobenzene 202197-26-0P, 3-Chloro-4-(3-fluorobenzyloxy)aniline 250790-05-7P, tert-Butyl 2-chloro-4-nitrobenzoate 263171-66-0P, 3-Chloro-4-(2-thiazolylthio)aniline 282104-36-3P, 1-(2-Chloro-4-nitrobenzoyl)azepane 332108-44-8P, 3-Methyl-4-[(2-pyridylmethyl)amino]nitrobenzene 379230-15-6P, 5-[(1-tert-Butoxycarbonylpiperidin-4-yl)oxy]-3,4-dihydroquinazolin-4-one 379230-16-7P, 5-(1-tert-Butyloxycarbonylpiperidin-4-yloxy)-4-chloroquinazoline 443882-99-3P, 2-Chloro-1-(3-fluorobenzyloxy)-4-nitrobenzene 524953-52-4P, 4-Chloro-5-(1-methylpiperidin-4-yloxy)quinazoline 524953-60-4P, 3-Chloro-4-(3-fluorophenoxy)aniline 524953-62-6P, 3-Chloro-4-(2,3-difluorophenoxy)aniline 524953-67-1P, 3-Chloro-4-[(2-pyridylmethyl)amino]aniline 524953-69-3P, 3-Methyl-4-[(2-pyridylmethyl)amino]aniline 524953-71-7P, 3-Chloro-4-[N-methyl-N-(2-pyridyl)amino]aniline 524953-73-9P, 3-Chloro-4-(2-pyridylamino)aniline 524953-75-1P, 3-Methyl-4-(2-pyridylamino)aniline 524953-77-3P, 3-Methyl-4-[N-methyl-N-(2-pyridyl)amino]aniline 524953-79-5P, 3-Chloro-4-[(3-fluorophenylamino)methyl]aniline 524953-81-9P, 3-Chloro-4-(8-quinolylthio)aniline 524953-87-5P, 3-(2-Chloro-4-aminophenoxymethyl)-1,5-dimethylpyrazole 524953-89-7P, 3-(2-Chloro-4-aminophenoxymethyl)-1-methylpyrazole 524953-91-1P, 5-(2-Chloro-4-aminophenoxymethyl)-3-methylisoxazole 524953-94-4P, 4-[4-(Azepan-1-ylcarbonyl)-3-chloroanilino]-5-fluoroquinazoline hydrochloride 524953-96-6P, 4-[1-(3-Fluorobenzyl)indazol-5-ylamino]-5-fluoroquinazoline hydrochloride 524953-98-8P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-fluoroquinazoline 524954-05-0P, 4-(3-Fluoro-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-14-1P, 4-(3-Chloro-4-hydroxyanilino)-5-[(tetrahydropyran-4-yl)oxy]quinazoline 524954-17-4P, 4-(3-Chloro-4-hydroxyanilino)-5-[(tetrahydrofuran-3-yl)oxy]quinazoline 524954-19-6P, 4-(3-Chloro-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-21-0P, 4-(3-Methyl-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-33-4P, 4-(5-Chloro-2-fluoro-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-37-8P, 2-Chloro-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]benzoic acid hydrochloride 524954-42-5P, 2-Ethynyl-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]benzoic acid hydrochloride 524954-54-9P, 4-(Indol-5-ylamino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524954-68-5P, 4-Benzyloxy-3-ethynylnitrobenzene 524954-70-9P, 3-Ethynyl-4-(2-fluorobenzyloxy)aniline 524954-72-1P, 3-Ethynyl-4-(3-fluorobenzyloxy)aniline 524954-74-3P, 4-(2,6-Difluorobenzyloxy)-3-ethynylaniline 524954-76-5P, 3-Ethynyl-4-(5-methylisoxazol-3-ylmethoxy)aniline 524954-78-7P, 3-Ethynyl-4-(thiazol-4-ylmethoxy)aniline 524954-80-1P, 3-Chloro-4-(2-pyrimidinylmethoxy)aniline 524954-82-3P, 4-(2-Aminothiazol-4-ylmethoxy)-3-chloroaniline 524954-84-5P, 3-Fluoro-4-[(1-methyl-1H-imidazol-2-yl)thio]aniline 524954-86-7P, 3-Fluoro-4-[(1-methyl-1H-1,3,4-triazol-2-yl)thio]aniline 524954-88-9P, 3-Chloro-4-(2-pyridylthio)aniline 524954-90-3P, 3-Chloro-4-(2-

pyrimidinylthio)aniline 524954-92-5P, 3-Chloro-4-[(1H-imidazol-2-yl)thio]aniline 524954-94-7P, 3-Fluoro-4-[(1H-imidazol-2-yl)thio]aniline 524955-03-1P, 2-[2-Chloro-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]phenoxy]-N-hydroxyacetamidine 524955-06-4P, 2-[2-Chloro-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]phenoxy]acetic acid hydrazide 524955-08-6P, 3,4-Dihydro-5-(tetrahydropyran-4-yloxy)quinazolin-4-one 524955-13-3P, 3,4-Dihydro-5-(tetrahydrofuran-3-yloxy)quinazolin-4-one 524955-26-8P, 4-(4-Iodoanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-30-4P, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-[(1-oxocyclohex-4-yl)oxy]quinazoline acetate 524955-33-7P, 4-[3-Chloro-4-(2-pyridylmethoxy)anilino]-5-fluoroquinazoline 524955-69-9P, 3,4-Dihydro-5-(1-methylpiperidin-4-yloxy)quinazolin-4-one 524955-70-2P, 3,4-Dihydro-5-(1,4-dioxaspiro[4.5]dec-8-yloxy)quinazolin-4-one 524955-72-4P, 4-Chloro-5-fluoroquinazoline hydrochloride 524955-73-5P, 4-(Azepan-1-ylcarbonyl)-3-chloroaniline 524955-74-6P, 2-[2-Chloro-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]phenoxy]acetonitrile hydrochloride 524955-75-7P, 2-(4-Amino-2-chlorophenoxy)acetonitrile 524955-76-8P, 4-Amino-2-chloro-5-fluorophenol 524955-77-9P, 3-Chloro-4-(3-fluorophenoxy)-1-nitrobenzene 524955-78-0P, 3-Chloro-4-(2,3-difluorophenoxy)-1-nitrobenzene 524955-79-1P, 3-Chloro-4-[N-methyl-N-(2-pyridyl)amino]nitrobenzene 524955-80-4P, 3-Methyl-4-(2-pyridylamino)nitrobenzene 524955-81-5P, 3-Methyl-4-[N-methyl-N-(2-pyridyl)amino]nitrobenzene 524955-82-6P, 5-Amino-3-chloro-1-(2-pyridylmethyl)indole 524955-83-7P, 3-Chloro-5-nitro-1-(2-pyridylmethyl)indole 524955-84-8P, 5-Amino-3-chloro-1-(2-pyridylmethyl)indazole 524955-85-9P, 3-Chloro-5-nitro-1-(2-pyridylmethyl)indazole 524955-86-0P 524955-87-1P, 3-Chloro-4-(2-pyridylthio)nitrobenzene 524955-88-2P, 3-Chloro-4-(2-pyrimidinylthio)nitrobenzene 524955-89-3P, 3-(2-Chloro-4-nitrophenoxymethyl)-1,5-dimethylpyrazole 524955-90-6P, 3-(2-Chloro-4-nitrophenoxymethyl)-1-methylpyrazole 524955-91-7P, 3-Fluoro-4-[(1H-imidazol-2-yl)thio]nitrobenzene 524955-92-8P, 2-Chloro-5-fluoro-4-nitrophenol 524955-93-9P, tert-Butyl 4-amino-2-ethynylbenzoate 524955-94-0P, tert-Butyl 2-ethynyl-4-nitrobenzoate 524955-96-2P, 3-Chloro-4-(2-pyrimidinylmethoxy)nitrobenzene 524955-97-3P, 4-(2-Aminothiazol-4-ylmethoxy)-3-chloronitrobenzene 524955-98-4P, 2-(2-Chloro-4-nitrophenoxy)acetonitrile 524955-99-5P, 5-(2-Chloro-4-nitrophenoxymethyl)-3-methylisoxazole 524956-00-1P, 3-Chloro-4-[(3-fluorophenylamino)methyl]nitrobenzene 524956-01-2P, 3-Chloro-1-nitro-4-(8-quinolylthio)benzene 524956-02-3P, 3-Chloro-5-nitroindole 524956-03-4P, 4-(2-Fluorobenzyloxy)-3-iodonitrobenzene 524956-04-5P, 4-(3-Fluorobenzyloxy)-3-iodonitrobenzene 524956-05-6P, 4-(2,6-Difluorobenzyloxy)-3-iodonitrobenzene 524956-06-7P, 3-Iodo-4-(4-thiazolylmethoxy)nitrobenzene 524956-07-8P, 3-Iodo-4-(5-methylisoxazol-3-ylmethoxy)nitrobenzene 524956-08-9P, tert-Butyl 2-bromo-4-nitrobenzoate 524956-09-0P, tert-Butyl 4-nitro-2-(trimethylsilylethynyl)benzoate 524956-10-3P, tert-Butyl 2-chloro-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]benzoate 524956-11-4P, tert-Butyl 2-ethynyl-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]benzoate hydrochloride 524956-12-5P, 4-(2-Fluorobenzyloxy)-3-(2-trimethylsilylethynyl)nitrobenzene 524956-13-6P, 4-(3-Fluorobenzyloxy)-3-(2-trimethylsilylethynyl)nitrobenzene 524956-14-7P, 4-(2,6-Difluorobenzyloxy)-3-(2-trimethylsilylethynyl)nitrobenzene 524956-15-8P, 4-(4-Thiazolylmethoxy)-

3-(2-trimethylsilylethynyl)nitrobenzene 524956-16-9P, 4-(5-Methylisoxazol-3-ylmethoxy)-3-(2-trimethylsilylethynyl)nitrobenzene 524956-17-0P, Ethyl 2-[2-Chloro-4-[[5-(1-methylpiperidin-4-yloxy)quinazolin-4-yl]amino]phenoxy]acetate 524956-18-1P, 4-[3-Chloro-4-(3-fluorobenzyloxy)aniline]-5-(1,4-dioxaspiro[4.5]dec-8-yloxy)quinazoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of quinazolines as erbB receptor tyrosine kinase
inhibitors for treatment of cancer)

IT 60-56-0, 2-Mercapto-1-methyl-1H-imidazole 96-32-2, Methyl bromoacetate 99-60-5, 2-Chloro-4-nitrobenzoic acid 100-44-7, Benzyl chloride, reactions 105-36-2, Ethyl bromoacetate 106-52-5, 4-Hydroxy-1-methylpiperidine 106-94-5, Propyl bromide 106-95-6, Allyl bromide, reactions 106-96-7, 3-Bromoprop-1-yne 108-05-4, Vinyl acetate, reactions 109-00-2, 3-Hydroxypyridine 109-01-3, 1-Methylpiperazine 109-08-0, 2-Methylpyrazine 111-49-9, Homopiperidine 139-59-3, 4-Phenoxyaniline 345-35-7, 2-Fluorobenzyl chloride 350-30-1, 3-Chloro-4-fluoronitrobenzene 350-46-9, 4-Fluoronitrobenzene 352-11-4, 4-Fluorobenzyl chloride 369-34-6, 3,4-Difluoronitrobenzene 372-19-0, 3-Fluoroaniline 372-20-3, 3-Fluorophenol 399-96-2, 3-Fluoro-4-hydroxyaniline 436-72-6, 5-Fluoro-3,4-dihydroquinazolin-4-one 446-48-0, 2-Fluorobenzyl bromide 453-20-3, 3-Hydroxytetrahydrofuran 455-88-9, 4-Fluoro-3-methylnitrobenzene 456-41-7, 3-Fluorobenzyl bromide 456-42-8, 3-Fluorobenzyl chloride 491-33-8, 8-Quinolinethiol 504-29-0, 2-Aminopyridine 540-37-4, 4-Iodoaniline 578-51-8, 2-Bromobenzyl chloride 611-19-8, 2-Chlorobenzyl chloride 612-13-5, 2-Cyanobenzyl chloride 612-23-7, 2-Nitrobenzyl chloride 619-08-9, 2-Chloro-4-nitrophenol 619-23-8, 3-Nitrobenzyl chloride 620-19-9, 3-Methylbenzyl chloride 620-20-2, 3-Chlorobenzyl chloride 622-40-2, 2-Morpholinoethanol 626-56-2, 3-Methylpiperidine 626-58-4, 4-Methylpiperidine 667-27-6, Ethyl difluorobromoacetate 697-73-4, 2,6-Difluorobenzyl chloride 698-80-6, 3,4-Difluorobenzyl chloride 824-45-3, 2,5-Dimethylbenzyl chloride 824-98-6, 3-Methoxybenzyl chloride 872-35-5, 2-Mercaptoimidazole 1066-54-2, (Trimethylsilyl)acetylene 1135-14-4, 4-(Phenylthio)aniline 1450-85-7, 2-Mercaptopyrimidine 1722-12-9, 2-Chloropyrimidine 2014-83-7, 2,6-Dichlorobenzyl chloride 2051-28-7, Decahydroquinoline 2081-44-9, Tetrahydropyran-4-ol 2315-36-8, 2-Chloro-N,N-diethylacetamide 2637-34-5, 2-Mercaptopyridine 2835-96-3, 4-Amino-2-methylphenol 2955-88-6, 2-Pyrrolidinoethanol 3040-44-6, 2-Piperidinoethanol 3099-31-8, 3-Picolyl chloride 3364-76-9, 4-Chloromethylthiazole 3438-46-8, 4-Methylpyrimidine 3731-51-9, 2-(Aminomethyl)pyridine 3827-49-4, 2-Chloro-5-fluorophenol 3964-52-1, 3-Chloro-4-hydroxyaniline 4441-30-9, 3-Morpholinopropanol 4597-87-9, 2-(Methylamino)pyridine 4812-45-7, 3-Chloro-5-nitroindazole 4857-42-5, 3-Methylisoxazole-5-carboxylic acid 5192-03-0, 5-Aminoindole 5292-43-3, tert-Butyl 2-bromoacetate 5317-33-9, 3-(4-Methylpiperazin-1-yl)propanol 5685-05-2, 2-Mercaptothiazole 5744-59-2, 1,5-Dimethylpyrazole-3-carboxylic acid 6146-52-7, 5-Nitroindole 6329-61-9, Decahydroisoquinoline 6418-38-8, 2,3-Difluorophenol 6482-24-2, 2-Bromoethyl methyl ether 6959-47-3, 2-Picolyl chloride hydrochloride 7035-02-1, 2-Methoxybenzyl chloride 7709-58-2, 4-Chloromethylthiazole hydrochloride 10445-91-7, 4-Picolyl chloride 13220-33-2, 3-Hydroxy-1-methylpyrrolidine 14337-43-0 16426-64-5, 2-Bromo-4-nitrobenzoic acid 16499-60-8, 4-Chloro-5-fluoroquinazoline

20603-00-3, 2-(Azepan-1-yl)ethanol 20845-34-5, (1-Methylpiperidin-2-yl)methanol 20850-43-5, Benzo[1,3]dioxol-5-ylmethyl chloride 22115-41-9, 2-Cyanobenzyl bromide 23784-96-5 24854-43-1, 1-Methyl-2-mercapto-1H-1,3,4-triazole 25016-20-0, 1-Methylpyrazole-3-carboxylic acid 34253-03-7, Methyl pyrimidine-2-carboxylate 35166-37-1, 5-Methyl-3-chloromethylisoxazole 37924-85-9, 3-Bromomethylbenzo[d]isoxazole 39204-47-2, 2-Chloromethylpyrazine 39238-07-8, 2-Methyl-4-chloromethylthiazole 42533-63-1, 2-Chloro-4-nitrobenzyl bromide 50868-99-0, 4-Hydroxymethyl-1,2,3-thiadiazole 53012-70-7, 3-Bromomethyl-1,2,5-thiadiazole 55117-15-2, 2-Chloro-6-fluorobenzyl chloride 57892-76-9, 2-Chloromethylimidazo[1,2-a]pyridine 60090-58-6, 2-Amino-4-(chloromethyl)thiazole hydrochloride 67004-64-2, 2-(1-Methylpyrrolidin-2-yl)ethanol 70258-18-3, 6-Chloro-3-chloromethylpyridine 77470-53-2, 4-Chloromethyl-2-methylthiazole hydrochloride 85062-97-1, 4-Methyl-2-nitrobenzyl chloride 85118-00-9, 2,6-Difluorobenzyl bromide 89487-91-2, 4-Hydroxy-3-iodonitrobenzene 109384-19-2, 1-(tert-Butoxycarbonyl)-4-hydroxypiperidine 133303-88-5, 3-Chloro-4-[(1-methyl-1H-imidazol-2-yl)thio]aniline 141567-53-5, (2-Methyloxazol-4-yl)methanol 172649-58-0, 4-(4-Chloromethylthiazol-2-yl)morpholine 179687-60-6, 3-Chloro-4-(2-thenoyl)aniline 179687-67-3, 3-Chloro-4-(2-pyridyloxy)aniline 179687-84-4, 3-Chloro-4-[(1-methyl-1H-imidazol-2-yl)methoxy]aniline 202197-31-7, 5-Amino-1-(3-fluorobenzyl)indazole 338413-13-1, 3-Chloro-4-(2-pyrimidinyloxy)aniline 364794-21-8, 3-Methyl-4-(2-pyridylmethoxy)aniline 524954-02-7, 4-(3-Chloro-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride 524954-29-8, 4-(3-Fluoro-4-hydroxyanilino)-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-09-7, 3-Chloro-4-(2-pyridylmethoxy)aniline 524955-15-5, 4-[3-Chloro-4-[(1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-23-5, 4-[3-Fluoro-4-[(1H-imidazol-2-yl)thio]anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline 524955-71-3, 5-[[1-(tert-Butoxycarbonyl)piperidin-4-yl]oxy)-3,4-dihydroquinazoline 524955-95-1, 3-Chloro-4-[(2-pyridylmethyl)amino]nitrobenzene 524956-19-2, 4-[3-Chloro-4-(3-fluorobenzyloxy)anilino]-5-(1,4-dioxaspiro[4.5]dec-8-yloxy)quinazoline
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for
treatment of cancer)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 138:73182 MARPAT
TITLE: Preparation of quinoline derivatives and quinazoline derivatives inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents
INVENTOR(S): Fujiwara, Yasunari; Senga, Terufumi; Nishitoba, Tsuyoshi; Osawa, Tatsushi; Miwa, Atsushi; Nakamura, Kazuhide
PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 441 pp.
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DOCUMENT TYPE: Patent
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WO 2003000660	A1	20030103	WO 2002-JP6239	20020621
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1411046	A1	20040421	EP 2002-738777	20020621
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004242603	A1	20041202	US 2004-480632	20040617
PRIORITY APPLN. INFO.:			JP 2001-190238	20010622
			WO 2002-JP6239	20020621

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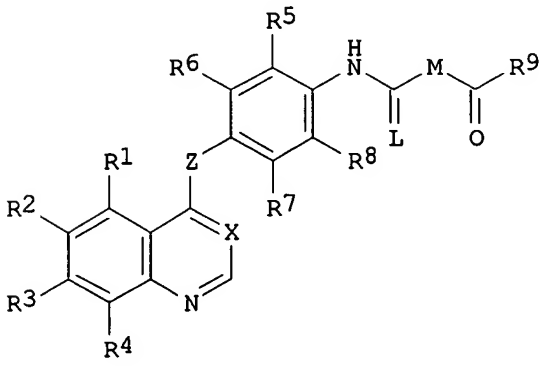

I

AB The title compds. represented by the formula (I) or pharmaceutically acceptable salts or solvates thereof [wherein X = CH, N; Z = O, S; L = O, S; M is CR10R11 (R10, R11 = H, alkyl, alkoxy) or NR12 (R12 = H, alkyl); R1, R2, R3 = H, HO, halo, NO2, (un)substituted NH2, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, (un)substituted C1-6 alkoxy, (un)saturated and (un)substituted 3 to 8-membered carbocyclic or heterocyclic group; R4 = H; R5-R8 = H, halo, C1-4 alkyl, C1-4 alkoxy; R9 = C1-6 alkyl optionally substituted by -T-R15 or -NR16R17 (wherein T = oxygen, sulfur, NH; R14 = (un)substituted and (un)saturated 3 to 8-membered carbocyclic or heterocyclic group; and R15-R17 = C1-6 alkyl, (un)substituted and (un)saturated 3 to 8-membered carbocyclic or heterocyclic group), -NR18R19 (R18, R19 = H, optionally substituted C1-6 alkyl, (un)substituted and (un)saturated 3 to 8-membered carbocyclic or heterocyclic group)] are prepared These compds. are useful for the treatment of malignant tumors such as stomach cancer,

brain tumor, large intestine (colorectal) cancer, pancreatic cancer, lung cancer, renal cancer, ovarian cancer, and prostate cancer. Thus, 1.89 mL phenylacetyl chloride and 2.09 g potassium thiocyanate were dissolved in 15 mL MeCN, stirred at 80° for 1 h, and extracted with CHCl3, followed by evaporation of CHCl3 under reduced pressure to give crude phenylacetyl thiocyanate which was dissolved in toluene/EtOH (1/1) and stirred with 3.03 g 4-[(6,7-dimethoxy-4-quinolyl)oxy]-3-fluoroaniline to give N-[4-[(6,7-dimethoxy-4-quinolyl)oxy]-3-fluorophenyl]-N'-(phenylacetyl)thiourea (II). II showed IC50 of 0.0087 μM for inhibiting Met phosphorylation of epidermoid carcinoma cell (A431) stimulated by human recombinant hepatocyte growth factor (HGF). II at 100 mg/kg inhibited by 70% the proliferation of human brain tumor cell (U87MG) transplanted in nude mice.

IC ICM C07D215-22
ICS C07D239-86; C07D401-12; C07D405-12; C07D409-12; C07D413-12; A61K031-47; A61K031-4709; A61K031-496; A61K031-517; A61K031-5377; A61P035-00

CC 27-17 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 28

ST quinoline prepn antitumor; autophosphorylation hepatocyte growth factor receptor quinoline inhibitor prepn

IT Phosphorylation, biological
(autophosphorylation; preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

IT Intestine, neoplasm
(colorectal; preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

IT Antitumor agents
Brain, neoplasm
Kidney, neoplasm
Lung, neoplasm
Neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Prostate gland, neoplasm
Stomach, neoplasm
(preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

IT Hepatocyte growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

IT Phosphorylation, biological
(protein; preparation of quinoline derivs. inhibiting autophosphorylation of receptor as antitumor agents)

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

IT 60-56-0, 1-Methyl-2-mercaptoimidazole 62-53-3, Aniline, reactions 79-37-8, Oxalyl chloride 86-55-5, Naphthalene-1-carboxylic acid 87-62-7, 2,6-Dimethylaniline 88-17-5, 2-Trifluoromethylaniline 88-65-3, 2-Bromobenzoic acid 90-04-0, 2-Methoxyaniline 91-61-2, 6-Methyl-1,2,3,4-tetrahydroquinoline 93-25-4, 2-Methoxyphenylacetic acid 95-51-2, 2-Chloroaniline 95-53-4, 2-Methylaniline, reactions 95-69-2, 4-Chloro-2-methylaniline 99-03-6 100-01-6, 4-Nitroaniline, reactions 100-46-9, Benzylamine, reactions 100-61-8, N-Phenylmethylamine, reactions 103-80-0, Phenylacetyl chloride 103-81-1, 2-Phenylacetamide 104-97-2, 3-Cyclopentylpropanoyl chloride 106-47-8, 4-Chloroaniline, reactions 106-49-0, 4-Methylaniline, reactions 106-93-4, 1,2-Dibromoethane 107-04-0, 1-Bromo-2-chloroethane 107-92-6, Butanoic acid, reactions 108-42-9, 3-Chloroaniline 108-44-1, 3-Methylaniline, reactions 108-91-8, Cyclohexylamine, reactions 108-98-5, Thiophenol, reactions 109-01-3, 1-Methylpiperazine 109-64-8, 1,3-Dibromopropane 109-70-6, 1-Bromo-3-chloropropane 109-73-9, Butylamine, reactions 109-89-7, Diethylamine, reactions 110-52-1, 1,4-Dibromobutane 110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions 122-59-8, Phenoxyacetic acid 123-75-1, Pyrrolidine, reactions 123-90-0, Thiomorpholine 134-20-3, Methyl 2-aminobenzoate 288-32-4, Imidazole, reactions 288-36-8, 1H-1,2,3-Triazole 326-63-6, 2-Fluorophenylacetamide 331-25-9, 3-Fluorophenylacetic acid 332-29-6, 4-Fluorophenylacetamide 333-20-0, Potassium thiocyanate 348-54-9, 2-Fluoroaniline 351-35-9, 3-Trifluoromethylphenylacetic acid 367-25-9, 2,4-Difluoroaniline 371-40-4, 4-Fluoroaniline 372-19-0, 3-Fluoroaniline 394-41-2, 3-Fluoro-4-nitrophenol 403-19-0, 2-Fluoro-4-nitrophenol 405-50-5, 4-Fluorophenylacetic acid 451-82-1, 2-Fluorophenylacetic acid 454-92-2, 3-Trifluoromethylbenzoic acid 462-08-8, 3-Aminopyridine 496-15-1, Indoline 505-66-8, 1,4-Diazacycloheptane 536-90-3, 3-Methoxyaniline 578-66-5, 8-Aminoquinoline 586-38-9, 3-Methoxybenzoic acid 591-27-5, 3-Aminophenol 608-31-1, 2,6-Dichloroaniline 609-02-9, Dimethyl methylmalonate 611-34-7, 5-Aminoquinoline 615-36-1, 2-Bromoaniline 618-36-0, 1-Phenylethylamine 621-36-3, 3-Methylphenylacetic acid 622-47-9, 4-Methylphenylacetic acid 628-46-6, 5-Methylhexanoic acid 644-36-0, 2-Methylphenylacetic acid 658-93-5, 3,4-Difluorophenylacetic acid 695-34-1, 2-Amino-4-methylpyridine 939-90-2, trans-2-Phenylcyclopropane-1-carboxylic acid 1072-67-9, 3-Amino-5-methylisoxazole 1072-98-6, 2-Amino-5-chloropyridine 1569-69-3, Cyclohexyl mercaptan 1603-40-3, 2-Amino-3-methylpyridine 1603-41-4, 2-Amino-5-methylpyridine 1679-07-8, Cyclopentanethiol 1798-09-0, 3-Methoxyphenylacetic acid 1824-81-3, 2-Amino-6-methylpyridine 1878-66-6, 4-Chlorophenylacetic acid 1918-77-0, (2-Thienyl)acetic acid 1918-79-2, 5-Methylthiophene-2-carboxylic acid 2106-02-7,

2-Chloro-4-fluoroaniline 2237-30-1, 3-Cyanoaniline 2444-36-2, 2-Chlorophenylacetic acid 2516-34-9, Cyclobutylamine 2516-93-0, Butoxyacetic acid 2544-06-1, 3-Methoxypropanoic acid 2688-84-8, 2-Phenoxyaniline 2987-53-3, 2-Methylthioaniline 3038-48-0, 2-Trifluoromethylphenylacetic acid 3132-64-7, Epibromohydrin 3218-02-8, Cyclohexanemethanamine 3400-45-1, Cyclopentanecarboxylic acid 3544-25-0, (4-Aminophenyl)acetonitrile 3740-52-1, 2-Nitrophenylacetic acid 3863-11-4, 3,4-Difluoroaniline 4324-38-3, 3-Ethoxypropanoic acid 4461-30-7, Chloroacetyl isocyanate 4518-10-9, Methyl 3-aminobenzoate 4635-59-0, 4-Chlorobutanoyl chloride 4747-21-1, Isopropylmethylamine 5018-30-4, Dimethyl methoxymalonate 5292-21-7, Cyclohexylacetic acid 5452-35-7, Cycloheptylamine 5509-65-9, 2,6-Difluoroaniline 6025-60-1, 1-(2-Aminophenyl)pyrrole 6065-54-9, Dimethyl 2,2-dimethylmalonate 6457-49-4, 4-Piperidinemethanol 6575-24-2, 2,6-Dichlorophenylacetic acid 6964-21-2, (3-Thienyl)acetic acid 7031-23-4, 3-Methylthiopropanoyl chloride 7568-92-5, 2-(2-Aminophenyl)ethanol 7782-26-5, (R)-2-Phenylpropanoic acid 15673-00-4, 3,3-Dimethylbutylamine 17282-00-7, 2-Amino-3-bromo-5-methylpyridine 22013-33-8, 6-Aminobenzo[1,4]dioxane 24425-40-9 27738-96-1, Chlorocarbonyl isocyanate 28059-64-5, 2-Benzylaniline 31252-42-3, 4-Benzylpiperidine 35889-00-0, 4-Cyclohexylphenylacetic acid 37517-81-0, Malonic acid chloride monomethyl ester 66787-75-5 81228-09-3, 2,4-Difluorophenylacetic acid 85068-27-5, 2,5-Difluorophenylacetic acid 85068-28-6, 2,6-Difluorophenylacetic acid 95262-10-5 105184-38-1, 3,5-Difluorophenylacetic acid 114152-23-7, 2,3,6-Trifluorophenylacetic acid 145689-41-4, 2,3-Difluorophenylacetic acid 228559-82-8, 4-[(6,7-Dimethoxy-4-quinolyl)oxy]-2-methylaniline 228559-85-1 286371-44-6, 2-Chloro-4-[(6,7-dimethoxy-4-quinolyl)oxy]aniline 286371-46-8, 4-[(6,7-Dimethoxy-4-quinolyl)oxy]-2,5-dimethylaniline 286371-47-9 286371-49-1 286371-53-7 347161-76-6, 4-[(6,7-Dimethoxy-4-quinolyl)oxy]-3-methylaniline 479690-16-9 479690-18-1, Bicyclo[2.2.1]heptane-7-acetic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

IT 459-04-1P, 4-Fluorophenylacetyl chloride 3097-74-3P, Methylmalonic acid monomethyl ester 154935-07-6P 190728-25-7P 228559-74-8P 286371-58-2P 286371-59-3P 347161-74-4P, 4-[(6,7-Dimethoxy-4-quinolyl)oxy]-3-fluoroaniline 347161-75-5P, 3-Chloro-4-[(6,7-dimethoxy-4-quinolyl)oxy]aniline 479690-02-3P 479690-03-4P 479690-04-5P 479690-05-6P 479690-06-7P 479690-07-8P 479690-08-9P 479690-09-0P 479690-10-3P 479690-11-4P 479690-12-5P 479690-13-6P 479690-14-7P 479690-15-8P 479690-19-2P 479690-20-5P 479690-21-6P 479690-22-7P 479690-23-8P 479690-24-9P 479690-25-0P 479692-63-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of quinoline derivs. inhibiting autophosphorylation of hepatocyte growth factor receptor as antitumor agents)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 137:119705 MARPAT
TITLE: Preparation of pyrazole compounds useful as protein kinase inhibitors, and therapeutic use thereof
INVENTOR(S): Bebbington, David; Charrier, Jean-Damien

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 14
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002059112	A2	20020801	WO 2001-US49594	20011220
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US 2003055068	A1	20030320	US 2001-26967	20011219
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US 2004157893	A1	20040812	US 2003-722374	20031125
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PRIORITY APPLN. INFO.:			US 2000-257887P	20001221
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			US 2000-232795P	20000915
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			US 2001-955601	20010914
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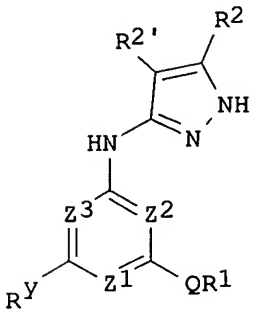
GI



I

AB The invention describes pyrazole compds. I [Z1 = N, CR; Z2 = N, CH; Z3 = N, CRx provided that one of Z1 and Z3 is N; Rx is substituted alkylidene Q = imine , O, S, etc.; R1 = T-(ring D); T = valence bond, alkylidene chain; ring D = 5-7-membered monocyclic ring, 8-10-membered bicyclic ring; R2, R2' = H, (un)substituted C1-6 aliphatic, (un)substituted C6-10 aryl, etc.; Ry = (un)substituted C1-6 aliphatic, (un)substituted C6-10 aryl, etc.; R = halo,

NO2, CN, etc.]. The compds. are useful as protein kinase inhibitors, especially as inhibitors of Aurora-2 and GSK-3, for treating diseases such as cancer, diabetes, and Alzheimer's disease.

IC ICM C07D403-14
ICS A61K031-53; A61K031-501; A61P035-00; C07D403-12; C07D401-14; C07D417-14; C07D409-14

CC 1-12 (Pharmacology)
Section cross-reference(s): 7, 28, 63

ST protein kinase inhibitor pyrazole therapeutic; Aurora 2 kinase inhibitor pyrazole therapeutic; GSK3 kinase inhibitor pyrazole therapeutic; cancer treatment pyrazole protein kinase inhibitor; diabetes treatment pyrazole protein kinase inhibitor; Alzheimer disease treatment pyrazole protein kinase inhibitor

IT AIDS (disease)
(AIDS dementia complex; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Mental disorder
(AIDS dementia; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Nervous system, disease
(Huntington's chorea; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Intestine, neoplasm
(colon; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Tau factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hyperphosphorylated; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Heart, disease
(hypertrophy; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Reperfusion
(injury; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Drug delivery systems
(prodrugs; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Phosphorylation, biological
(protein; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Mental disorder
(psychosis; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Alopecia
Alzheimer's disease
Anti-Alzheimer's agents
Anti-ischemic agents
Antidiabetic agents
Antiparkinsonian agents
Antipsychotics
Antitumor agents
Cardiovascular agents
Cardiovascular system, disease
Chemotherapy

Diabetes insipidus
Diabetes mellitus
Ischemia
Mammary gland, neoplasm
Multiple sclerosis
Nervous system, disease
Nervous system agents
Ovary
Ovary, neoplasm
Parkinson's disease
Schizophrenia
Stomach
Stomach, neoplasm
(pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Multiple sclerosis
(therapeutic agents; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT Catenins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(β-, phosphorylation; pyrazole compds. as protein kinase inhibitors, and therapeutic use)

IT 444344-95-0P 444344-96-1P 444344-97-2P 444344-98-3P 444344-99-4P
444345-00-0P 444345-01-1P 444345-02-2P 444345-03-3P 444345-04-4P
444345-05-5P 444345-06-6P 444345-07-7P 444345-08-8P 444345-09-9P
444345-10-2P 444345-11-3P 444345-12-4P 444345-13-5P 444345-14-6P
444345-15-7P 444345-16-8P 444345-17-9P 444345-18-0P 444345-19-1P
444345-20-4P 444345-21-5P 444345-22-6P 444345-23-7P 444345-24-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyrazole compds. as protein kinase inhibitors, and therapeutic use)

L13 ANSWER 6 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 135:45790 MARPAT
TITLE: Multibinding protein kinase inhibitors
INVENTOR(S): Griffin, John H.; Ji, Yu-hua; Mammen, Mathai; Marquess, Daniel; Moran, Edmund J.; Wray, Jonathan W.
PATENT ASSIGNEE(S): Advanced Medicine, Inc., USA
SOURCE: PCT Int. Appl., 252 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001042243	A2	20010614	WO 2000-US33201	20001207
WO 2001042243	A3	20021107		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002002169	A1	20020103	US 2000-732438 20001207
US 2002177600	A1	20021128	US 2002-93068 20020306
US 2004235870	A1	20041125	US 2004-824005 20040414

PRIORITY APPLN. INFO.: US 1999-169996P 19991208
US 1999-266316P 19991208
US 1999-456594 19991208
US 2000-732438 20001207
US 2002-93068 20020306

AB Disclosed are multibinding compds., LpXq [wherein L = a ligand which is a protein kinase inhibitor; X = a linker; p = 2-10; q = 1-20], which inhibit or modulate the activity of protein kinases and pharmaceutical compns. containing such compds. A number of divalent prophetic examples, each containing two substituted pyrimidines, benzimidazoles, (hetero)aryl groups, amino acid derivs., etc. and a difunctional linker, are given. The multibinding compds. of this invention are useful for treating diseases or medical disorders mediated by protein kinases (no data).

IC ICM C07D471-00

CC 21-2 (General Organic Chemistry)
Section cross-reference(s): 1

ST dimeric multimeric multibinding protein kinase inhibitor prepn

IT 9026-43-1, Protein kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(preparation of multibinding protein kinase inhibitors)

L13 ANSWER 7 OF 26 MARPAT COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 135:33232 MARPAT
TITLE: Preparation of stilbene derivatives and their use as antiviral agents
INVENTOR(S): Klimkait, Thomas; Hamy, Francois
PATENT ASSIGNEE(S): Universitaet Basel, Switz.
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001040194	A1	20010607	WO 2000-EP11628	20001122

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1261587	A1	20021204	EP 2000-977556 20001122
EP 1261587	B1	20030716	

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

AT 245144 E 20030815 AT 2000-977556 20001122

PRIORITY APPLN. INFO.: GB 1999-28418 19991201
WO 2000-EP11628 20001122

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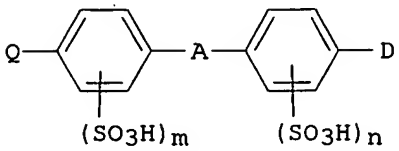

I

AB The title compds. I [A = CH2CH2, CH:CH; D = pyrazolyl derivative; m, n = 1-4; Q = amino, NO2, NHG, etc.] and their use as antiviral agents are given. E.g., trans-5-amino-2-[2-[4-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)-2-sulfophenyl]ethenyl]benzenesulfonic acid was prepared Inhibition of viral growth of HIV-1 by I in cellular systems was determined

IC ICM C07D231-26
ICS A61K031-4155; C07D403-12; A61P031-18

CC 21-2 (General Organic Chemistry)
Section cross-reference(s): 1, 10

ST stilbene deriv prepn antiviral agent; antiAIDS stilbene deriv

IT Anti-AIDS agents
Antiviral agents
(preparation of stilbene derivs. and their use as antiviral agents)

IT 343630-71-7P 343630-73-9P 343630-75-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of stilbene derivs. and their use as antiviral agents)

IT 343630-72-8P 343630-74-0P 343630-76-2DP, copper complex 343630-76-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of stilbene derivs. and their use as antiviral agents)

IT 108-77-0, Cyanuric chloride 118-92-3, 2-Aminobenzoic acid 343630-77-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of stilbene derivs. and their use as antiviral agents)

IT 343630-78-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of stilbene derivs. and their use as antiviral agents)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 134:266317 MARPAT
TITLE: Preparation of quinazolines as aurora 2 kinase inhibitors
INVENTOR(S): Mortlock, Andrew Austen; Keen, Nicholas John; Jung,

	Frederic Henri; Brewster, Andrew George
PATENT ASSIGNEE(S):	Astrazeneca AB, Swed.; Astrazeneca UK Limited
SOURCE:	PCT Int. Appl., 306 pp.
	CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021596	A1	20010329	WO 2000-GB3580	20000918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2384291	AA	20010329	CA 2000-2384291	20000918
BR 2000014116	A	20020521	BR 2000-14116	20000918
EP 1218354	A1	20020703	EP 2000-960840	20000918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003509499	T2	20030311	JP 2001-524975	20000918
EE 200200119	A	20030415	EE 2002-119	20000918
BG 106492	A	20030131	BG 2002-106492	20020307
ZA 2002002234	A	20030619	ZA 2002-2234	20020319
NO 2002001399	A	20020430	NO 2002-1399	20020320
PRIORITY APPLN. INFO.:			GB 1999-22154	19990921
			GB 1999-22170	19990921
			WO 2000-GB3580	20000918

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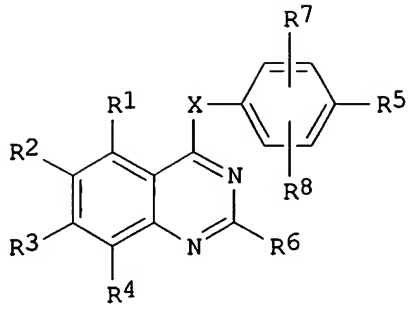

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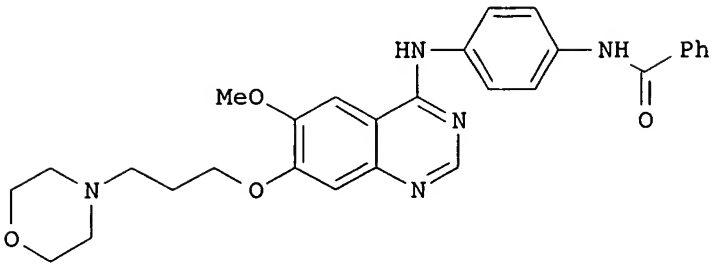

II

AB Title compds. (I) [wherein X = O, S, SO, SO2, NH, or NR12; R12 = H or alkyl; R1-R4 = independently halo, CN, NO2, alkylsulfanyl, N(OH)R13, or R15X1; R13 = H or alkyl; X1 = a direct bond, O, CH2, OC(O), CO, CO2, S, SO, SO2, or (un)substituted NHCO, CONH, SO2NH, NHSO2, or NH; R15 = H or (un)substituted hydrocarbyl, heterocyclyl, or alkoxy; R5 = NHCO2R9, NHCOR9, NHSO2R9, COR9, CO2R9, SOR9, SO2OR9, CONR10R11, SONR10R11, or SO2NR10R11; R9-R11 = independently H or (un)substituted hydrocarbyl or heterocyclyl; or R10 and R11 together with the N to which they are attached = (un)substituted heterocyclyl; R6 = H or (un)substituted hydrocarbyl or heterocyclyl; R7 and R8 = independently H, halo, alkyl, (di)alkoxy(methyl), alkanoyl, CF3, CN, NHY2, alkenyl, alkynyl, or (un)substituted Ph, PhCH2, or heterocyclyl; or a salt, ester, or amide thereof] were prepared as aurora 2 kinase inhibitors for the treatment of proliferative diseases, such as cancer. For example, a 7-step sequence involving (1) alkylation of morpholine with 1-bromo-3-chloropropane (49%), (2) addition of Et vanillate to yield Et 3-methoxy-4-(3-morpholinopropoxy)benzoate (100%), (3) nitration (86%), (4) reduction to the amine using 10% Pd/C (100%), (5) cycloaddn. with formamide to form the quinazoline(68%), (6) chlorination to give 4-chloro-6-methoxy-7-(3-morpholinopropoxy)quinazoline (60%), and (7) amination with N-benzoyl-4-aminoaniline (58%) yielded II. The latter inhibited the serine/threonine kinase activity of aurora 2 kinase by 50% at a concentration of 0.0193 μM. In addition, II gave 50% inhibition of MCF-7 cell proliferation at 1.06 μM and reduced BrdU incorporation into cellular DNA by 50% at 0.159-0.209 μM.

IC ICM C07D239-94
ICS A61K031-517; A61P035-00

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST quinazoline prepn aurora 2 kinase inhibitor; anticancer antiproliferative quinazoline prepn

IT Antitumor agents
Cyclin dependent kinase inhibitors
Proliferation inhibition
(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT Proliferation inhibition
(proliferation inhibitors; preparation of 4-substituted quinazoline aurora 2
kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 736-02-7P, N-Benzoyl-3-(trifluoromethyl)-4-aminoaniline 6737-42-4P 7357-67-7P, N-(3-Chloropropyl)-morpholine 13790-39-1P, 4-Chloro-6,7-dimethoxyquinazoline 13794-72-4P, 6,7-Dimethoxy-3,4-dihydroquinazolin-4-one 15457-50-8P, N-Benzoyl-4-hydroxyaniline 17625-83-1P, N-Benzoyl-4-aminoaniline 38259-78-8P 63565-22-0P, N-Benzoyl-2-chloro-4-aminoaniline 64160-38-9P, N-Benzoyl-2-chloro-4-nitroaniline 84197-48-8P, N-Benzoyl-2-cyano-4-nitroaniline 104478-92-4P, N-Benzoyl-2-methyl-4-nitroaniline 104478-97-9P, N-Benzoyl-2-methoxy-4-aminoaniline 104478-99-1P 108479-25-0P, Ethyl 3-methoxy-4-(3-morpholinopropoxy)benzoate 117367-10-9P, N-Benzoyl-3-(trifluoromethyl)-4-nitroaniline 123855-51-6P, 4-Hydroxymethyl-1-tert-butyloxycarbonylpiperidine 129912-30-7P, 4-Chloro-6,7-dimethoxyquinazoline hydrochloride 142851-03-4P, Ethyl 1-(tert-butoxycarbonyl)-4-piperidinecarboxylate 166815-96-9P, 4-(4-Methylphenylsulphonyloxymethyl)-1-tert-butyloxycarbonylpiperidine 179688-01-8P, 7-Benzyloxy-6-methoxy-3,4-dihydroquinazolin-4-one 179688-53-0P, 6-Acetoxy-7-methoxy-3,4-dihydroquinazolin-4-one 179688-54-1P, 4-Chloro-6-acetoxy-7-methoxyquinazoline hydrochloride 183322-18-1P, 4-Chloro-6,7-di(2-methoxyethoxy)quinazoline 196194-62-4P, 6-Methoxy-7-(3-morpholinopropoxy)-3,4-dihydroquinazolin-4-one 196195-13-8P, 4-Chloro-6-methoxy-7-(3-morpholinopropoxy)quinazoline 229958-93-4P, 1-(3-Bromopropyl)-4,5-dihydroimidazole 230955-75-6P, 4-Chloro-6-acetoxy-7-methoxyquinazoline 264208-58-4P, Ethyl 3-methoxy-4-(1-tert-butyloxycarbonylpiperidin-4-ylmethoxy)benzoate 264208-60-8P, Ethyl 3-methoxy-4-(1-methylpiperidin-4-ylmethoxy)benzoate 264208-63-1P, Ethyl 3-methoxy-4-(1-methylpiperidin-4-ylmethoxy)-6-nitrobenzoate 264208-66-4P, Ethyl 6-amino-3-methoxy-4-(1-methylpiperidin-4-ylmethoxy)benzoate 264208-69-7P, 6-Methoxy-7-((1-methylpiperidin-4-yl)methoxy)-3,4-dihydroquinazolin-4-one 264208-72-2P, 4-Chloro-6-methoxy-7-((1-methylpiperidin-4-yl)methoxy)quinazoline 330999-62-7P, 4-(4-Aminoanilino)-6-methoxy-7-(3-morpholinopropoxy)quinazoline 330999-81-0P, Ethyl 3-methoxy-4-(2,2,2-trifluoroethoxy)-6-nitrobenzoate 330999-82-1P, Ethyl 3-methoxy-4-(2,2,2-trifluoroethoxy)-6-aminobenzoate 330999-83-2P, 6-Methoxy-7-(2,2,2-trifluoroethoxy)-3,4-dihydroquinazolin-4-one 330999-84-3P, Ethyl 3-methoxy-4-(3-morpholinopropoxy)-6-nitrobenzoate 330999-85-4P, Ethyl 3-methoxy-4-(3-morpholinopropoxy)-6-aminobenzoate 331776-46-6P 331776-47-7P, N-Benzoyl-2-cyano-4-aminoaniline 331776-48-8P, N,N-Di(benzoyl)-2-methyl-4-nitroaniline 331776-50-2P, N-Benzoyl-2-chloro-4-hydroxyaniline 331776-51-3P, 4-(4-Aminoanilino)-6-methoxy-7-(2,2,2-trifluoroethoxy)quinazoline 331776-54-6P, 2-(4-Morpholino)-4-chloro-6,7-dimethoxyquinazoline 331776-64-8P, 4-(Methylthio)-6-methoxy-7-(cyanomethoxy)quinazoline 331776-70-6P 331776-72-8P, 4-(Methylthio)-6-methoxy-7-(3-hydroxyprop-1-enyl)quinazoline

331776-73-9P, 6-Methoxy-7-benzyloxy-3,4-dihydroquinazolin-4-thione
331776-74-0P, 4-(Methylthio)-6-methoxy-7-benzyloxyquinazoline
331776-75-1P, 4-(Methylthio)-6-methoxy-7-(trifluoromethanesulphonyloxy)-quinazoline 331776-76-2P, 4-(Methylthio)-7-(3-hydroxy-3-methylbut-1-ynyl)quinazoline 331776-77-3P, 4-(Methylthio)-7-(trifluoromethanesulphonyloxy)quinazoline 331776-78-4P, 4-(Methylthio)-6-methoxy-7-(3-hydroxyprop-1-ynyl)quinazoline
331776-82-0P, 4-(Methylthio)-7-aminoquinazoline 331776-83-1P, N-(2-Cyanophenyl)-4-amino-2-chlorobenzamide 331776-84-2P, N-(2-Cyanophenyl)-2-chloro-4-nitrobenzamide 331776-86-4P 331776-87-5P, 4-((4-Carbomethoxy)anilino)-6,7-dimethoxyquinazoline 331776-88-6P
331776-91-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 331770-21-9P 331771-20-1P 331775-74-7P
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 331772-11-3P 331772-14-6P 331772-33-9P 331772-44-2P 331772-45-3P
331772-47-5P 331772-51-1P 331772-52-2P 331772-53-3P 331774-61-9P
331775-47-4P 331775-48-5P 331775-49-6P 331775-55-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 202475-67-0P 331770-22-0P 331770-23-1P 331770-24-2P 331770-25-3P
331770-26-4P 331770-27-5P 331770-28-6P 331770-29-7P 331770-30-0P
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331770-86-6P 331770-87-7P 331770-88-8P 331770-89-9P 331770-90-2P
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331771-52-9P 331771-53-0P 331771-54-1P 331771-55-2P 331771-56-3P
331771-57-4P 331771-58-5P 331771-59-6P 331771-60-9P 331771-61-0P
331771-62-1P 331771-63-2P 331771-64-3P 331771-65-4P 331771-66-5P
331771-67-6P 331771-68-7P 331771-69-8P 331771-70-1P 331771-71-2P
331771-72-3P 331771-73-4P 331771-74-5P 331771-75-6P 331771-76-7P
331771-77-8P 331771-78-9P 331771-79-0P 331771-80-3P 331771-81-4P
331771-82-5P 331771-83-6P 331771-84-7P 331771-85-8P 331771-86-9P
331771-87-0P 331771-88-1P 331771-89-2P 331771-90-5P 331771-91-6P
331771-92-7P 331771-93-8P 331771-94-9P 331771-95-0P 331771-96-1P
331771-97-2P 331771-98-3P 331771-99-4P 331772-00-0P 331772-01-1P
331772-02-2P 331772-03-3P 331772-04-4P 331772-05-5P 331772-06-6P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 331772-65-7P 331772-66-8P 331772-67-9P 331772-68-0P 331772-69-1P
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331774-98-2P 331774-99-3P 331775-00-9P 331775-01-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 331775-02-1P 331775-03-2P 331775-04-3P 331775-05-4P 331775-06-5P
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331776-22-8P 331776-23-9P 331776-24-0P 331776-25-1P 331776-26-2P
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331776-37-5P 331776-38-6P 331776-39-7P 331776-40-0P 331776-41-1P
331776-42-2P 331776-43-3P 331776-44-4P 331810-24-3P 331825-58-2P
331825-60-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

Searcher : Shears 571-272-2528

(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 9026-43-1, Serine/threonine kinase 233599-27-4, Protein kinase aurora 2
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 50-79-3, 2,5-Dichlorobenzoic acid 59-51-8, Methionine 59-67-6, Nicotinic acid, reactions 62-23-7, 4-Nitrobenzoic acid 63-74-1, Sulphanilamide 77-86-1, Tris-(hydroxymethyl)methylamine 79-41-4, Methacrylic acid, reactions 79-44-7, N,N-Dimethyl-carbamoyl chloride 88-14-2, Furan-2-carboxylic acid 89-41-8, 4-Methoxy-3-nitrobenzoic acid 94-25-7, n-Butyl 4-aminobenzoate 94-53-1, 3,4-Methylenedioxybenzoic acid 96-33-3, Methyl acrylate 96-98-0, 4-Methyl-3-nitrobenzoic acid 97-52-9, 2-Methoxy-4-nitroaniline 98-09-9, Benzenesulfonyl chloride 98-16-8, 3-(Trifluoromethyl)aniline 98-89-5, Cyclohexanecarboxylic acid 99-34-3, 3,5-Dinitrobenzoic acid 99-52-5 99-60-5, 2-Chloro-4-nitrobenzoic acid 100-09-4, 4-Methoxybenzoic acid 100-36-7, N,N-Diethyl-ethylenediamine 103-76-4, N-(2-Hydroxyethyl)piperazine 104-01-8, 4-Methoxyphenylacetic acid 104-78-9, 3-(Diethylamino)-propylamine 106-50-3, 1,4-Phenylenediamine, reactions 107-19-7, Propargyl alcohol 108-00-9, N,N-Dimethylethylenediamine 108-01-0, N,N-Dimethylethanolamine 108-09-8, 1,3-Dimethylbutylamine 108-91-8, Cyclohexylamine, reactions 109-01-3, N-Methyl piperazine 109-05-7, 2-Methylpiperidine 109-55-7, 3-Dimethylamino-propylamine 109-70-6, 1-Bromo-3-chloropropane 109-76-2, 1,3-Propanediamine 109-83-1, N-Methyl ethanolamine 109-85-3, 2-Methoxyethyl-amine 109-96-6, 3-Pyrroline 110-57-6, trans-1,4-Dichloro-2-butene 110-73-6, N-Ethyl ethanolamine 110-91-8, Morpholine, reactions 111-26-2, Hexylamine 111-39-7 111-42-2, Diethanolamine, reactions 111-49-9 111-68-2, n-Heptylamine 111-95-5 115-19-5, 2-Methyl-3-butyn-2-ol 115-69-5, 2-Amino-2-methyl-1,3-propanediol 115-70-8, 2-Amino-2-ethyl-1,3-propanediol 118-41-2, 3,4,5-Trimethoxybenzoic acid, reactions 118-91-2, 2-Chlorobenzoic acid 120-13-8, (4-Ethoxy-3-methoxyphenyl)acetic acid 121-05-1, N,N-Diisopropyl-ethylenediamine 121-32-4, 3-Ethoxy-4-hydroxybenzaldehyde 121-87-9, 2-Chloro-4-nitroaniline 121-92-6, 3-Nitrobenzoic acid 122-80-5 123-00-2, 4-(3-Aminopropyl)-morpholine 123-30-8, 4-Aminophenol 123-90-0, Thiomorpholine 124-07-2, Octanoic acid, reactions 124-68-5, 2-Amino-2-methyl-1-propanol 127-69-5 140-75-0, 4-Fluorobenzylamine 140-77-2, 3-(Cyclopentyl)-propanoic acid 141-91-3, 2,6-Dimethylmorpholine 142-25-6, N,N,N'-Trimethyl ethylenediamine 150-13-0, 4-Aminobenzoic acid 156-57-0, 2-Mercaptoethylamine hydrochloride 156-87-6, 3-Amino-1-propanol 351-35-9, 3-(Trifluoromethyl)-phenylacetic acid 372-09-8, Cyanoacetic acid 373-88-6, 2,2,2-Trifluoroethylamine hydrochloride 393-11-3, 3-(Trifluoromethyl)-4-nitroaniline 399-76-8, 5-Fluoroindole-2-carboxylic acid 403-16-7, 3-Chloro-4-fluorobenzoic acid 405-50-5, 4-Fluorophenylacetic acid 445-29-4, 2-Fluorobenzoic acid 451-82-1, (2-Fluorophenyl)acetic acid 453-71-4, 4-Fluoro-3-nitrobenzoic acid 455-24-3, 4-(Trifluoromethyl)-benzoic acid 455-38-9, 3-Fluorobenzoic acid 456-22-4, 4-Fluorobenzoic acid 462-08-8, 3-Aminopyridine 462-94-2, 1,5-Pentanediamine 504-03-0, 2,6-Dimethyl-piperidine 504-29-0, 2-Aminopyridine 504-75-6, Imidazoline 527-69-5, 2-Furoyl chloride 527-72-0, Thiophene-2-carboxylic acid 530-57-4, 3,5-Dimethoxy-4-hydroxybenzoic acid 534-03-2, 2-Amino-1,3-propanediol

535-80-8, 3-Chlorobenzoic acid 540-51-2, 2-Bromoethanol 552-16-9, 2-Nitrobenzoic acid 579-75-9, 2-Methoxybenzoic acid 585-70-6, 5-Bromo-2-furoic acid 592-55-2, 2-Bromoethyl ethyl ether 610-30-0, 2,4-Dinitrobenzoic acid 616-30-8, 3-Amino-1,2-propanediol 617-05-0, Ethyl vanillate 617-89-0, Furfurylamine 619-45-4, Methyl 4-aminobenzoate 621-82-9, Cinnamic acid, reactions 622-26-4, 4-(2-Hydroxyethyl)-piperidine 622-40-2, N-(2-Hydroxyethyl)morpholine 625-43-4 626-58-4, 4-Methylpiperidine 626-67-5, N-Methylpiperidine 627-00-9, 4-Chlorobutyric acid 627-37-2, N-Methyl allylamine 627-42-9, Methyl 2-chloroethyl ether 645-12-5, 5-Nitro-2-furoic acid 646-01-5, 3-(Methylthio)propanoic acid 646-07-1, 4-Methylpentanoic acid 651-06-9 693-05-0, N-Methyl 2-cyano-ethylamine 693-07-2 694-05-3, 1,2,3,6-Tetrahydropyridine 701-97-3, 3-(Cyclohexyl)-propanoic acid 729-99-7 765-30-0, Cyclopropylamine 765-38-8, 2-Methylpyrrolidine 782-45-6, 4-Aminobenzanilide 825-99-0, 3-(Methylthio)-benzoic acid 882-06-4, (E)-4-Nitrocinnamic acid 929-06-6, 2-(2-Aminoethoxy)ethanol 930-52-9, 2-Ethylimidazoline 940-31-8, 2-Phenoxypropanoic acid 940-62-5, (E)-4-Chlorocinnamic acid 1001-53-2, N-Acetyl ethylenediamine 1003-03-8, Cyclopentylamine 1013-96-3, (E)-2-Nitrocinnamic acid 1122-58-3, 4-(Dimethylamino)-pyridine 1123-00-8, Cyclopentylacetic acid 1126-09-6, Ethyl 4-piperidinecarboxylate 1137-41-3, 4-Aminobenzophenone 1137-42-4, 4-Hydroxybenzophenone 1199-77-5, α-Methylcinnamic acid 1476-11-5, cis-1,4-Dichloro-2-butene 1477-50-5, Indole-2-carboxylic acid 1484-84-0, 2-(2-Hydroxyethyl)-piperidine 1501-05-9, 4-Benzoylbutyric acid 1521-38-6, 2,3-Dimethoxybenzoic acid 1532-84-9, 1-Aminoisoquinoline 1575-74-2, 2-Methyl-4-pentenoic acid 1576-43-8 1576-44-9 1583-58-0, 2,4-Difluorobenzoic acid 1759-53-1, Cyclopropane carboxylic acid 1772-76-5, (E)-3-Nitrocinnamic acid 1821-12-1, 4-Phenylbutyric acid 1866-38-2, 3-Chlorocinnamic acid 1877-72-1, 3-Cyanobenzoic acid 1877-73-2, 3-Nitrophenylacetic acid 1878-66-6, 4-Chlorophenylacetic acid 1885-29-6, 2-Aminobenzonitrile 1918-77-0, 2-Thiopheneacetic acid 1948-92-1 1967-31-3, 3-Chloro-4-carboxybenzoic acid 1975-50-4, 2-Methyl-3-nitrobenzoic acid 2038-03-1, 4-(2-Aminoethyl)morpholine 2058-49-3 2107-70-2, 3-(3,4-Dimethoxy-phenyl)propanoic acid 2252-63-3, N-(4-Fluorophenyl)piperazine 2345-34-8, 4-Acetoxybenzoic acid 2345-51-9, 3-Butynoic acid 2439-57-8, N-Methyl tetrahydrofurfurylamine 2508-29-4, 5-Amino-1-pentanol 2516-34-9, Cyclobutylamine 2516-47-4, Cyclopropane-methylamine 2516-96-3, 2-Chloro-5-nitrobenzoic acid 2544-06-1, 3-Methoxy-propionic acid 2799-21-5, (R)-3-Pyrrolidinol 2835-68-9, 4-Aminobenzamide 2857-97-8, Trimethylsilyl bromide 2861-28-1, (3,4-Methylenedioxy-phenyl)acetic acid 2942-59-8, 2-Chloronicotinic acid 2975-41-9, 2-Aminoindan 2991-28-8, 2,5-Difluorobenzoic acid 3025-95-4, N-Acetyl-3-aminopropanoic acid 3153-44-4, 3-(4-Methoxybenzoyl)-propanoic acid 3179-63-3, 3-(Dimethylamino)-propanol 3218-02-8, Cyclohexanemethyl-amine 3222-47-7, 6-Methylnicotinic acid 3273-14-1, 1-(2-Hydroxyethyl)-1,2,4-triazole 3350-06-9, 3-Aminocyclopent-1-ene 3378-71-0, 2,5-Dimethyl-pyrrolidine 3399-73-3, 1-Cyclohexene-1-ethanamine 3400-45-1, Cyclopentane carboxylic acid 3433-37-2, 2-Piperidinemethanol 3529-09-7, 2-Dibutylamino-ethylamine 3644-18-6, 1-(2-Dimethylaminoethyl)piperazine 3721-95-7, Cyclobutanecarboxylic acid 3724-10-5, 2-(Methylthio)benzoic acid 3731-53-1, 4-(Aminomethyl)-pyridine 3881-20-7 3970-35-2, 2-Chloro-3-nitrobenzoic acid 4000-72-0, 1-(Aminomethyl)-1-cyclohexanol 4005-51-0, 2-Amino-1,3,4-thiadiazole 4104-45-4, 3-(Methylthio)propylamine 4318-37-0, 1-Methyl homopiperazine 4318-42-7,

1-Isopropyl-piperazine 4324-38-3, 3-Ethoxypropanoic acid 4441-30-9, N-(3-Hydroxypropyl)morpholine 4441-63-8, 4-(Cyclohexyl)butyric acid 4476-28-2 4519-39-5, 2,3-Difluorobenzoic acid 4547-57-3, 4-(n-Butoxy)phenylacetic acid 4572-03-6, 1-(3-Aminopropyl)-4-methylpiperazine 4606-65-9, 3-Piperidine-methanol 4653-11-6, 4-(2-Thienyl)butyric acid 4785-66-4, 3-Sulpholanyl acetic acid 4795-29-3, Tetrahydrofurfurylamine 4892-89-1 4897-50-1, 4-Piperidino-piperidine 4920-80-3, 3-Methoxy-2-nitrobenzoic acid 4998-07-6, 3,4-Dimethoxy-6-nitrobenzoic acid 5004-07-9, 4-(1-Pyrrolidinyl)-piperidine 5036-48-6, 1-(3-Aminopropyl)-imidazole 5292-21-7, Cyclohexaneacetic acid 5308-25-8, N-Ethylpiperazine 5317-32-8, N-(3-Hydroxypropyl)piperazine 5326-23-8, 6-Chloronicotinic acid 5332-73-0, 3-Methoxypropylamine 5350-93-6, 5-Amino-2-chloropyridine 5382-16-1, 4-Hydroxy piperidine 5407-04-5, 3-(Dimethylamino)-1-chloropropane hydrochloride 5471-90-9 5521-55-1, 2-Methylpyrazine-5-carboxylic acid 5625-67-2, 2-Oxopiperazine 5653-40-7, 4,5-Dimethoxyanthranilic acid 5728-52-9, 4-Biphenylacetic acid 5744-59-2, 1,5-Dimethyl-1H-pyrazole-3-carboxylic acid 5856-63-3, D-2-Amino-1-butanol 5930-93-8, 4-Nitropyrrole-2-carboxylic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

IT 6168-72-5, 2-Amino-1-propanol 6284-84-0, cis-2,5-Dimethyl-piperazine 6291-85-6, 3-Ethoxypropylamine 6303-58-8, 4-Phenoxybutyric acid 6304-89-8, 3-Acetoxybenzoic acid 6338-70-1, Tetrahydro-3-thiophenamine 1,1-dioxide 6482-24-2, 2-Bromoethyl methyl ether 6547-53-1, 4-Benzyloxyphenyl-acetic acid 6850-35-7, 3-Methylcyclohexylamine 6850-65-3, 4-Aminocyclo-hexanol 6859-99-0, 3-Hydroxypiperidine 6959-48-4, 3-Picolyl chloride hydrochloride 6964-21-2, 3-Thiopheneacetic acid 7051-34-5, Cyclopropylmethyl bromide 7154-73-6, 1-(2-Aminoethyl)-pyrrolidine 7170-38-9, 3-Phenoxypropanoic acid 7304-32-7, 2-Fluoro-5-nitrobenzoic acid 7311-63-9, 5-Bromothiophene-2-carboxylic acid 7531-52-4, L-Prolinamide 7663-77-6, 1-(3-Aminopropyl)-2-pyrrolidinone 10517-21-2, 5-Chloro indole-2-carboxylic acid 13156-06-4, N-Isopropyl-3-hydroxyazetidine 13325-10-5, 4-Amino-1-butanol 13364-16-4, 2-Methyl-pentylamine 13484-40-7, 1-(2-Methoxyethyl)piperazine 13831-31-7, Acetoxyacetyl chloride 13889-98-0, N-Acetyl piperazine 14003-16-8, 5-Methyl-2-furanmethanamine 14290-86-9, (E)-4-Fluorocinnamic acid 14763-60-1 16397-19-6, 2-Amino-1-hexanol 16499-88-0, 3-Butoxypropyl-amine 16874-33-2, Tetrahydro-2-furoic acid 16957-70-3, trans-2-Methylpent-2-enoic acid 17247-58-4, Cyclobutylmethyl bromide 17420-30-3, 2-Cyano-4-nitroaniline 18278-34-7, 4-Hydroxy-2-methoxybenzaldehyde 18542-42-2, 2-(Methylthio)ethylamine 18600-42-5, 4-Nitrobenzylamine hydrochloride 19815-17-9, 4-Chloro-7-nitroquinazoline 19961-27-4, N-Ethyl isopropylamine 19968-85-5, 1-Aminomethyl-1-cyclohexanol hydrochloride 20173-04-0 20327-23-5, N-Cyclopropyl piperazine 21035-59-6 21211-22-3, 3-Chlorobenzothiophene-2-carboxylic acid 21539-47-9 23356-96-9, (S)-2-Pyrrolidinemethanol 25236-64-0 25850-22-0, 4-Amino-2,2-dimethyltetrahydropyran 25952-53-8, 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride 26116-12-1, 2-(Aminomethyl)-1-ethylpyrrolidine 26371-07-3, 1-Piperidine propanoic acid 26690-80-2, N-(tert-Butoxycarbonyl)-ethanolamine 26734-09-8, 3-Amino-2,2-dimethyl-1-propanol 27578-60-5, 2-Piperidino-ethylamine 27631-29-4, 2,4-Dichloro-6,7-dimethoxyquinazoline 27757-85-3, Thiophene-2-methylamine 30433-91-1, 2-Thiophene ethylamine 30964-00-2,

6-Heptynoic acid 31230-17-8, 3-Amino-5-methylpyrazole 32852-81-6, 3-Phenoxyphenylacetic acid 33208-99-0, L-Alaninamide hydrochloride 33331-99-6 34698-41-4, 1-Aminoindan 34750-64-6 35794-11-7, 3,5-Dimethyl-piperidine 36489-03-9, 2-(Ethylthio)ethylamine 37143-54-7, 2-Amino-1-methoxypropane 38196-09-7, 3-(4-Hydroxy-3-nitrophenyl)propanoic acid 39178-35-3, Isonicotinoyl chloride hydrochloride 39546-32-2, Isonipecotamide 40306-32-9 40499-83-0, 3-Hydroxy pyrrolidine 41239-40-1 42514-50-1, 3-Amino-3-methyl-1-butanol 44565-47-1 45347-82-8, 3-Hydroxy azetidine 50274-85-6 51387-90-7, 2-(2-Aminoethyl)-1-methylpyrrolidine 52671-64-4, 3-Chloro-4-aminophenol hydrochloride 53293-00-8, 5-Hexynoic acid 54872-83-2, 1-Piperidinepropanoyl chloride 57165-06-7 58859-46-4, Ethyl-4-amino-1-piperidinecarboxylate 60547-98-0, 2-Amino-4-benzyloxy-5-methoxybenzamide 60923-28-6 62937-45-5, D-Prolinamide 63765-79-7 64021-83-6, N,N'-Dimethyl-3-aminopyrrolidine 64415-15-2, 4-Aminosulphonyl-1-hydroxy-2-naphthoic acid 67515-55-3, 4-Fluoro-3-(trifluoromethyl)benzoic acid 67579-87-7 67801-07-4, (E)-3-(Trifluoromethyl)-cinnamic acid 68453-63-4, 1-(3-Hydroxypropyl)-4,5-dihydroimidazole 70987-78-9, (2S)-(+)-Glycidyl tosylate 71026-66-9, N-(t-Butoxycarbonyl)-4-aminoaniline 72934-37-3, 1-(4-Chlorophenyl)-cyclopropane carboxylic acid 73579-08-5, 1-Methyl-4-(methylamino)piperidine 74141-12-1, E-3-(Tributylstannyl)-2-propen-1-ol 81018-64-6, Thiazoline-2-carboxylic acid 81029-08-5, 4-(Methylsulphonyl)-3-nitrobenzoic acid 85068-28-6, 2,6-Difluorophenyl-acetic acid 89895-06-7, 4-Acetyl piperidine hydrochloride 103057-44-9, N-(tert-Butoxycarbonyl)-3-hydroxypyrrolidine 104587-51-1, (2S,4R)-2-(Hydroxymethyl)-4-hydroxypyrrolidine 105184-38-1, 3,5-Difluorophenyl-acetic acid 115132-84-8 133659-14-0, 2-Chloro-3-methoxythiophene-4-carboxylic acid 137709-66-1 141699-57-2, N-(tert-Butoxycarbonyl)-3-hydroxypyrrolidine methanesulphonate 143128-39-6, 4-Amino-2-chloro-4'-fluorobenzophenone 144870-96-2 162364-72-9, 4-Chloro-6-methoxy-7-benzyloxyquinazoline 162848-23-9, 2-Bromo-3-methoxythiophene-4-carboxylic acid 179688-29-0, 6,7-Di(2-methoxyethoxy)-3,4-dihydroquinazolin-4-one 205194-33-8, 4-(3-Hydroxypropyl)-thiomorpholine-1,1-dioxide 220141-72-0, 3,4,5-Trifluorobenzyl bromide 220896-01-5, 7-Benzyloxy-3,4-dihydroquinazolin-4-thione 330999-50-3, 4-(4-Aminoanilino)-6,7-dimethoxyquinazoline 330999-74-1, 4-(4-(N-Boc-amino)anilino)-6-methoxy-7-(3-morpholinopropoxy)quinazoline dihydrochloride 330999-79-6, 4-Chloro-6-methoxy-7-(2,2,2-trifluoroethoxy)quinazoline 330999-80-9, Ethyl 4-(2,2,2-trifluoroethoxy)-3-methoxybenzoate 331734-30-6, 3-Aminotetrahydrothiophene-S,S-dioxide dihydrochloride 331776-45-5, (E)-2,3,4-Trifluorocinnamic acid 331776-49-9, N-(4-Amino-2-(trifluoromethyl)phenyl)benzamide 331776-52-4, 4-(4-(N-Boc-amino)anilino)-6-methoxy-7-(2,2,2-trifluoroethoxy)quinazoline 331776-53-5 331776-55-7 331776-56-8 331776-57-9, 4-((4-(N-Benzoyl)amino)anilino)-6-methoxy-7-hydroxyquinazoline trifluoroacetate 331776-58-0, 4-((4-(N-Benzoyl)amino)anilino)-6-methoxy-7-benzyloxyquinazoline trifluoroacetate 331776-59-1 331776-60-4 331776-61-5, 4-((4-(N-Benzoyl)amino)anilino)-6-methoxy-7-(4-piperidinoxy)quinazoline 331776-62-6, 4-(Methylthio)-6-methoxy-7-((4,5-dihydro-2-imidazolyl)methoxy)quinazoline 331776-63-7, 4-(Methylthio)-6-methoxy-7-hydroxyquinazoline 331776-65-9, 4-((4-(N-Benzoyl)amino)anilino)-6-methoxy-7-(2-bromoethoxy)quinazoline 331776-66-0, 3-(Aminomethyl)-thiophene dihydrochloride 331776-67-1 331776-68-2, (R)-4-((4-(N-Benzoyl)amino)anilino)-6-methoxy-7-

(glycidyl)quinazoline 331776-69-3 331776-71-7 331776-79-5, 4-((4-(N-Benzoyl)amino)anilino)-7-nitroquinazoline 331776-80-8 331776-81-9, 4-(Methylthio)-7-nitroquinazoline 331776-85-3, 4-Amino-2,4'-difluorobenzophenone 331776-89-7, 4-(4-Carboxyphenyl)-6-methoxy-7-(3-morpholinopropoxy)quinazoline 331776-90-0, 4-(4-Carboxyanilino)-6-methoxy-7-(3-morpholinopropoxy)quinazoline dihydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 134:173040 MARPAT
TITLE: NSAID- and EGFR kinase inhibitor-containing composition for the treatment or inhibition of colonic polyps and colorectal cancer
INVENTOR(S): Frost, Philip; DiScafani-Marro, Carolyn Mary
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001012227	A1	20010222	WO 2000-US21021	20000802
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2380904	AA	20010222	CA 2000-2380904	20000802
BR 2000013219	A	20020423	BR 2000-13219	20000802
EP 1202746	A1	20020508	EP 2000-950930	20000802
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003507342	T2	20030225	JP 2001-516570	20000802
NZ 517120	A	20041029	NZ 2000-517120	20000802
US 6432979	B1	20020813	US 2000-634787	20000809
NO 2002000663	A	20020409	NO 2002-663	20020211
ZA 2002001156	A	20030512	ZA 2002-1156	20020211
PRIORITY APPLN. INFO.:			US 1999-373261	19990812
			US 1999-198212P	19990812
			WO 2000-US21021	20000802

AB A method is provided for treating or inhibiting colonic polyps or colorectal cancer in a mammal in need thereof which comprises administering an NSAID and an EGFR kinase inhibitor. A NSAID, sulindac, and an EGFR kinase inhibitor, N-[4-((3-bromophenyl)amino)6-quinazolinyl]-2-

butynamide, showed synergistic activity in reduction of intestinal polyps in an animal model.
IC ICM A61K045-06
ICS A61K031-505; A61K031-47; A61K031-505; A61K031-19; A61K031-47; A61K031-19
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
ST polyp colon NSAID EGFR kinase inhibitor; colon cancer NSAID EGFR kinase inhibitor; nonsteroidal antiinflammatory EGFR kinase inhibitor colon polyp cancer; EGF receptor kinase inhibitor NSAID colon polyp cancer; sulindac quinazolinyl butynamide deriv colon polyp
IT Drug delivery systems
(NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT Intestine, neoplasm
(colon, polyp; NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT Intestine, neoplasm
(colorectal, inhibitors; NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT Antitumor agents
(colorectal; NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT Intestine, neoplasm
(familial polyposis; NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT Anti-inflammatory agents
(nonsteroidal; NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT Drug interactions
(synergistic; NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT 5104-49-4, Flurbiprofen 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 22204-53-1, Naproxen 29679-58-1, Fenoprofen 31793-07-4, Pirprofen 31842-01-0, Indoprofen 33005-95-7, Tiaprofenic acid 38194-50-2, Sulindac 40828-46-4, Suprofen 41340-25-4, Etodolac 51234-28-7, Benoxaprofen 53716-49-7, Carprofen 71125-38-7, Mobicox 74103-06-3, Ketorolac 162011-90-7, Rofecoxib 169590-42-5, Celecoxib 194423-06-8 326894-84-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
IT 79079-06-4, EGFR kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NSAID- and EGFR kinase inhibitor-containing composition for treatment of colon polyps and colorectal cancer)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 133:335167 MARPAT
TITLE: Preparation of diaryl carboxylic acids and derivatives as peroxisome proliferator-activated receptor ligands.
INVENTOR(S): Jayyosi, Zaid; McGeehan, Gerard M.; Kelley, Michael F.; Labaudiniere, Richard F.; Zhang, Litao; Groneberg, Robert D.; McGarry, Daniel G.; Caulfield, Thomas J.; Minnich, Anne; Bobko, Mark
PATENT ASSIGNEE(S): Aventis Pharmaceuticals Products Inc., USA
SOURCE: PCT Int. Appl., 167 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064888	A1	20001102	WO 2000-US11833	20000428
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2370250	AA	20001102	CA 2000-2370250	20000428
EP 1177187	A1	20020206	EP 2000-928698	20000428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000010605	A	20020213	BR 2000-10605	20000428
EE 200100556	A	20030217	EE 2001-556	20000428
NZ 515086	A	20031031	NZ 2000-515086	20000428
US 6635655	B1	20031021	US 2000-662649	20000914
NO 2001005075	A	20011123	NO 2001-5075	20011018
ZA 2001008798	A	20030305	ZA 2001-8798	20011024
HR 2001000795	A1	20030228	HR 2001-795	20011026
PRIORITY APPLN. INFO.:			US 1999-131455P	19990428
			WO 2000-US11833	20000428

AB Ar1(CR1R2)aA(CR3R4)bAr2(CR5R6)cB(CR7R8)dEZ[Ar1, Ar2 = aryl, fused arylcycloalkenyl, fused arylcycloalkyl, fused arylheterocycloalkenyl, fused arylheterocyclyl, heteroaryl, fused heteroarylcycloalkenyl, fused heteroarylcycloalkyl, fused heteroarylheterocyclyl, etc.; A = O, S, SO, SO2, NR13, CO, NR14CO, CONR15, NR14CONR15, CR14:N, bond, etc.; B = O, S, NR19, bond, CO, NR20CO, CONR20; E = bond, CH2CH2; Z = R21O2C, R21OC, cycloimide, cyano, R21O2SHNCO, R21O2SHN, (R21)2NCO, R21O-substituted 2,4-thiazolidinedionyl, tetrazolyl; a, d = 0-6; b, c = 0-4; R1, R3, R5, R7 = H, halo, alkyl, CO2H, alkoxycarbonyl, aralkyl; R2, R4, R6, R8 = (CH2)qX; q = 0-3; R14, R15, R20 = H, alkyl, aralkyl, CO, alkoxycarbonyl; R14R15 = atoms to form a 5-6 membered azaheterocyclyl; R19, R21 = H, aryl, alkyl, cycloalkyl, aralkyl], were prepared as agonists or antagonists of the PPAR receptor (no data). Thus, 3-(quinolin-2-ylmethoxy)propan-1-ol in DMPU/THF

at 0° was treated with NaH and then with Me 2-bromomethyl-6-methylbenzoate followed by stirring overnight at room temperature to give Me 2-methyl-6-[3-(quinolin-2-ylmethoxy)propoxymethyl]benzoate.

IC ICM C07D401-12
ICS A61K031-33; A61K031-19; A61P043-00; C07D257-04; C07D215-14; C07D215-18; C07D217-04; C07D417-12; C07D215-12; C07D403-12; C07D239-90; C07D405-12; C07D241-44; C07D409-12; C07D215-60; C07D231-56; C07D213-64; C07D215-22; C07D307-81

CC 27-17 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 25, 28

ST PPAR ligand diaryl carboxylic acid prepn; carboxylate diaryl prepn peroxisome proliferator activated receptor ligand; hyperinsulinism treatment diaryl carboxylic acid prepn; antidiabetic diaryl carboxylic acid prepn; hyperlipidemia treatment diaryl carboxylic acid; cardiovascular agent diaryl carboxylic acid; quinolinylmethoxypropoxymethy lbenzoate prepn PPAR ligand

IT Antiarteriosclerotics
(antiatherosclerotics; preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT Appetite
(disorder, treatment; preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT Peroxisome proliferator-activated receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(ligands; preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT Diabetes mellitus
(non-insulin-dependent, treatment; preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT Antidiabetic agents
Antihypertensives
Cardiovascular agents
Hypolipemic agents
(preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT Disease, animal
(syndrome X; preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT Peroxisome proliferator-activated receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(γ, ligands; preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT 7141-98-2P 15542-29-7P 39503-11-2P 69026-15-9P 85593-77-7P
102649-98-9P 104448-53-5P 107813-59-2P 107813-63-8P 107813-64-9P
107813-78-5P 107813-79-6P 107813-81-0P 107813-82-1P 107813-83-2P
109485-96-3P 114497-39-1P 114497-40-4P 114497-41-5P 114497-42-6P
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304023-96-9P 304023-97-0P 304023-98-1P 304023-99-2P 304024-00-8P
304024-01-9P 304024-02-0P 304024-03-1P 304024-04-2P 304024-05-3P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT 55-21-0, Benzamide 75-36-5, Acetyl chloride 100-39-0, Benzyl bromide 100-83-4, 3-Hydroxybenzaldehyde 103-71-9, Phenyl isocyanate, reactions 107-21-1, 1,2-Ethanediol, reactions 110-63-4, 1,4-Butanediol, reactions 111-29-5, 1,5-Pentanediol 123-08-0, 4-Hydroxybenzaldehyde 126-30-7 504-63-2, 1,3-Propanediol 534-07-6, 1,3-Dichloroacetone 590-17-0, Bromoacetonitrile 612-62-4, 2-Chloroquinoline 626-02-8, 3-Iodophenol 637-59-2, 1-Bromo-3-phenylpropane 824-42-0, 2-Hydroxy-3-methylbenzaldehyde 928-90-5, Hex-5-ynol 939-26-4, 2-Bromomethylnaphthalene 1123-63-3, 4-Chloro-2,6-dimethylphenol 1490-25-1 2038-57-5, Benzenepropanamine 2524-37-0, Ethyl 2,4-dihydroxy-6-methylbenzoate 2623-87-2, 4-Bromobutyric acid 3147-64-6, 6-Methoxysalicylic acid 4377-41-7, 2-Chloromethylquinoline 5470-96-2, 2-Quinolinecarboxaldehyde 6555-40-4, Ethyl 6-methylsalicylate 7699-19-6 13214-66-9, 4-Phenyl-1-butylamine 13325-10-5, 4-Amino-1-butanol 22833-69-8, Methyl 2-hydroxy-6-methoxybenzoate 53293-00-8, 5-Hexynoic acid 57455-06-8, 3-Iodobenzyl alcohol 304025-28-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of diaryl carboxylic acids and derivs. as PPAR ligands)

IT 14920-81-1P, Methyl 2,6-dimethylbenzoate 30494-97-4P,
4-(Chloromethyl)-2-phenyloxazole 56427-77-1P 92959-28-9P
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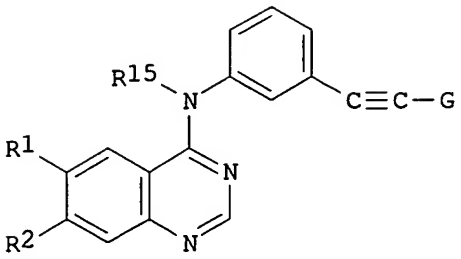
304025-17-0P 304025-18-1P 304025-19-2P 304025-20-5P 304025-21-6P
304025-22-7P 304025-23-8P 304025-24-9P 304025-25-0P 304025-26-1P
304025-37-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diaryl carboxylic acids and derivs. as PPAR ligands)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 133:281796 MARPAT
TITLE: Method for preparation of anticancer 4-(3-ethynylphenylamino)quinazoline derivatives and intermediates thereof
INVENTOR(S): Lehner, Richard Shelton; Norris, Timothy; Santafianos, Dinos Paul
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000290262	A2	20001017	JP 2000-91300	20000329
JP 3420549	B2	20030623		
EP 1044969	A2	20001018	EP 2000-302256	20000320
EP 1044969	A3	20001129		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000001486	A	20010502	BR 2000-1486	20000327
EG 22506	A	20030331	EG 2000-364	20000327
TW 553939	B	20030921	TW 2000-89105605	20000327
BG 104278	A	20010831	BG 2000-104278	20000328
CA 2302965	AA	20000930	CA 2000-2302965	20000329
CA 2302965	C	20040217		
ZA 2000001586	A	20011001	ZA 2000-1586	20000329
JP 2003176274	A2	20030624	JP 2002-360742	20000329
NO 2000001648	A	20001002	NO 2000-1648	20000330
TR 200000837	A2	20001121	TR 2000-200000837	20000330
EE 200000255	A	20001215	EE 2000-255	20000330
NZ 503683	A	20010928	NZ 2000-503683	20000330
US 6476040	B1	20021105	US 2000-538635	20000330
NZ 512818	A	20030131	NZ 2000-512818	20000330
CN 1276370	A	20001213	CN 2000-104595	20000331
HR 2000000182	A1	20010430	HR 2000-182	20000331
PRIORITY APPLN. INFO.:			US 1999-127072P	19990331
			JP 2000-91300	20000329
			NZ 2000-503683	20000330

OTHER SOURCE(S): CASREACT 133:281796
GI



I

AB The title compds. [I; G = H; R1, R2 = C1-10 alkyl or alkoxy each optionally substituted by ≤2 groups selected from HO or C1-6 alkoxy; R15 = H, C1-10 alkyl, C6-10 aryl-(CH2)q; q = 0-4], pharmacol. acceptable salts or solvates thereof, which are useful as anticancer agents (no data), are prepared by treatment of I [G = C(OH)R3R4 protecting group; R3, R4 = C1-6 alkyl] with alkali or alkaline earth metal hydroxide in a solvent containing hydroxy-C1-10 group or treatment of I (G = SiR3R4R5 protecting group; R3, R4, R5 = C1-6 alkyl) with tetra(C1-6 alkyl)ammonium fluoride in an aprotic solvent. Thus, 4-chloro-6,7-bis(2-methoxyethoxy)quinazoline was treated with 3-[(trimethylsilyl)ethynyl]aniline in 2-propanol and refluxed for 2.5 h to give 88% I.HCl (G = trimethylsilyl, R1 = R2 = 2-methoxyethoxy, R15 = H) which was stirred with Bu4NF in THF at room temperature for 1 h to give 72% I.HCl (G = R15 = H, R1 = R2 = 2-methoxyethoxy).

IC ICM C07D239-94

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST ethynylphenylaminoquinazoline prepn anticancer; quinazoline ethynylphenylamino prepn anticancer

IT Antitumor agents
(method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. and intermediates thereof)

IT Silylation
(retro; method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. via desilylation of (silylethynylphenylamino)quinazoline derivs.)

IT Protective groups
(silyl derivs. or 1-hydroxy-1,1-dialkylmethyl for acetylene, deprotection of; preparation of anticancer (ethynylphenylamino)quinazoline derivs. via deprotection of [[(silyl- or 1-hydroxy-1,1-dialkylmethyl)ethynyl]phenylamino]quinazoline derivs.)

IT 60-29-7, Diethyl ether, uses 67-66-3, Chloroform, uses 67-68-5, Dimethyl sulfoxide, uses 68-12-2, Dimethylformamide, uses 75-05-8, Acetonitrile, uses 75-09-2, Dichloromethane, uses 108-88-3, Toluene, uses 109-99-9, Tetrahydrofuran, uses 110-71-4, 1,2-Dimethoxyethane
RL: NUU (Other use, unclassified); USES (Uses)

(method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. and intermediates thereof)

IT 71-36-3, Butan-1-ol, reactions
RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. and intermediates thereof)

IT 100-51-6, Benzyl alcohol, reactions 100-61-8, N-Methylaniline, reactions 104-94-9 429-41-4, Tetrabutylammonium fluoride 578-54-1, 2-Ethylaniline 585-79-5, 1-Bromo-3-nitrobenzene 1066-54-2, Trimethylsilylacetylene 1305-62-0, Calcium hydroxide, reactions 1309-42-8, Magnesium hydroxide 1310-58-3, Potassium hydroxide, reactions 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, reactions 7719-09-7, Thionyl chloride 21351-79-1, Cesium hydroxide 69088-96-6, 4-(3-Aminophenyl)-2-methyl-3-butyn-2-ol 183322-18-1, 4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline
RL: RCT (Reactant); RACT (Reactant or reagent)
(method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. and intermediates thereof)

IT 110598-30-6P, 3-[(Trimethylsilyl)ethynyl]aniline 183322-33-0P, 3-[(Trimethylsilyl)ethynyl]-1-nitrobenzene 299912-58-6P 299912-59-7P 299912-60-0P 299912-61-1P 299912-64-4P 299912-66-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. and intermediates thereof)

IT 183319-69-9P 248594-19-6P 299912-62-2P 299912-63-3P 299912-65-5P 299912-67-7P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(method for preparation of anticancer (ethynylphenylamino)quinazoline derivs. and intermediates thereof)

IT 67-63-0, Propan-2-ol, uses 78-92-2, Butan-2-ol 109-86-4, 2-Methoxyethanol
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; method for preparation of anticancer (ethynylphenylamino)quinazoli
ne derivs. and intermediates thereof)

L13 ANSWER 12 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:222659 MARPAT
TITLE: Preparation of aminoalkylphosphonic ester derivatives as cell adhesion inhibitors
INVENTOR(S): Kono, Yasushi; Sawada, Takayuki; Nomura, Masahiro; Takahashi, Yukie; Tsubuki, Takeshi; Sakoe, Yasuhiko; Kuriyama, Kazuhiko
PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000015645 A1 20000323 WO 1999-JP4913 19990910
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9956485 A1 20000403 AU 1999-56485 19990910
PRIORITY APPLN. INFO.: JP 1998-258841 19980911
WO 1999-JP4913 19990910

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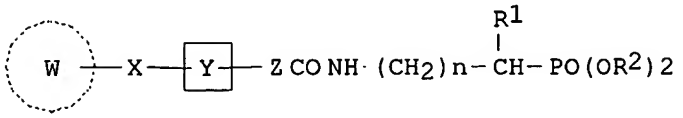

I

AB Phosphonic ester derivs. represented by general formula [I; W = thiazole ring, (un)substituted benzothiazole, pyridothiazole, pyridine, quinoline, pyridazine, phthalazine, quinoxaline, pyrimidine, quinazoline, thienopyrimidine, benzimidazole, purine, or indole ring; X = NH(CH2)m (wherein m = 0-2), CONH; Y = (un)substituted benzene, or naphthalene, pyridine, or quinoline, or benzofuran, coumarin, chroman, or chromanone, 1,3-thiazole ring; Z = (CH2)q (wherein q = 0-2), CH:CH, OCH2, OCMe2, SCH2, SOCH2, SO2CH2, NHCO(CH2)r (wherein r = 02); R1 = H, C1-4 alkoxycarbonyl, CO2H, C1-4 alkoxyphosphoryl; R2 = C1-4 alkyl; n = 0-2] and pharmacol. acceptable salts thereof are prepared These compds. have an activity of inhibiting a ICAM-1 or VCAM-1 mediated binding of cell adhesion mols. without inhibiting the expression of cell adhesion mols. and thus, are useful as immunosuppressants, anti-inflammatory agents, antiallergic agents and tumor metastasis inhibitors. Thus, 4'-(benzothiazol-2-yl)cinnamic acid was condensed with aminomethanephosphonic acid di-Et ester using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in the presence of 4-dimethylaminopyridine and Et3N in DMF at room temperature for 10 h to give [4'-(benzothiazol-2-yl)cinnamoyl]aminomethanephosphonic di-Et ester. A title compound (II) in vitro inhibited by 88% the binding of U937 cell to human umbilical vein endothelial cells (HUVEC) which were treated with human interleukin-1β to induce ICAM-1 and VCAM-1.

IC ICM C07F009-572
ICS C07F009-58; C07F009-6503; C07F009-6509; C07F009-6539; C07F009-6541; C07F009-6558; C07F009-6561; A61K031-66
CC 29-7 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 1
ST aminoalkylphosphonic ester prepn cell adhesion inhibitor; thiazole contg aminoalkylphosphonic ester prepn immunosuppressant; benzothiazole contg aminoalkylphosphonic ester prepn antiinflammatory; pyridothiazole contg aminoalkylphosphonic ester prepn tumor metastasis inhibitor; pyridine contg aminoalkylphosphonic ester prepn allergy inhibitor; quinoline contg aminoalkylphosphonic ester prepn; pyridazine contg aminoalkylphosphonic

ester prepn; phthalazine contg aminoalkylphosphonic ester prepn; quinoxaline contg aminoalkylphosphonic ester prepn; pyrimidine contg aminoalkylphosphonic ester prepn; quinazoline contg aminoalkylphosphonic ester prepn; thienopyrimidine contg aminoalkylphosphonic ester prepn; benzimidazole contg aminoalkylphosphonic ester prepn; purine contg aminoalkylphosphonic ester prepn; indole contg aminoalkylphosphonic ester prepn

IT Antitumor agents
(metastasis; preparation of aminoalkylphosphonic ester derivs. as cell adhesion inhibitors and drugs)

IT Allergy inhibitors
Anti-inflammatory agents
Cell adhesion
Immunosuppressants
(preparation of aminoalkylphosphonic ester derivs. as cell adhesion inhibitors and drugs)

IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(preparation of aminoalkylphosphonic ester derivs. as cell adhesion inhibitors and drugs)

IT

261615-13-8P	261615-15-0P	261615-16-1P	261615-17-2P	261615-18-3P
261615-19-4P	261615-20-7P	261615-21-8P	261615-22-9P	261615-23-0P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminoalkylphosphonic ester derivs. as cell adhesion inhibitors and drugs)

IT 98-88-4, Benzoyl chloride 615-20-3, 2-Chlorobenzothiazole 619-89-6, 4-Nitrocinnamic acid 638-07-3, 4-Chloroacetoacetic acid ethyl ester 1762-95-4, Ammonium thiocyanate 2182-80-1, 4-(Benzothiazol-2-yl)benzaldehyde 2393-18-2, 4-Aminocinnamic acid 2536-91-6, 2-Amino-6-methylbenzothiazole 3507-18-4 5326-23-8, 2-Chloropyridine-5-carboxylic acid 16017-69-9 16112-21-3, 2-(p-Tolyl)benzothiazole 20485-38-5 50917-72-1 52112-82-0 198195-25-4 261617-27-0 261617-31-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminoalkylphosphonic ester derivs. as cell adhesion inhibitors and drugs)

IT 532-55-8P, Benzoyl isothiocyanate 24239-18-7P, 2-(4-Bromomethylphenyl)benzothiazole 52112-81-9P 261348-95-2P
261348-96-3P 261348-97-4P 261348-98-5P 261617-24-7P 261617-25-8P
261617-26-9P 261617-28-1P 261617-29-2P 261617-30-5P 261617-32-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aminoalkylphosphonic ester derivs. as cell adhesion inhibitors and drugs)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:222544 MARPAT
TITLE: Preparation of malonic diester derivatives as cell adhesion inhibitors and process for producing the same
INVENTOR(S): Kono, Yasushi; Nomura, Masahiro; Sawada, Takayuki; Ando, Naoki; Takahashi, Yukie; Kuriyama, Kazuhiko
PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000015604	A1	20000323	WO 1999-JP4914	19990910

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9956486 A1 20000403 AU 1999-56486 19990910
PRIORITY APPLN. INFO.: JP 1998-258840 19980911
WO 1999-JP4914 19990910

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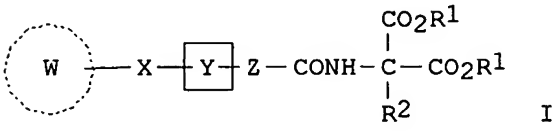

I

AB Described are malonic diesters derivs. represented by general formula [I; W = (un)substituted benzene, pyridine, quinoline, benzothiazole, pyrimidine, quinazoline, thienopyrimidine, or benzimidazole; X = NH, CONH; Y = (un)substituted benzene, naphthalene, pyridine, chroman, or 1,3-thiazole; Z = CH:CH, OCH2, OCMe2, NHCOCH2CH2, or (CH2)n; wherein n = 03; R1 = C1-4 lower alkyl; R2 = H, C1-4 lower alkyl or alkoxycarbonyl] and pharmacol. acceptable salts thereof being capable of preventing ICAM-1 and VCAM-1, which play the major roles among cell adhesion mols., from binding to leukocytes; and cell adhesion inhibitors containing as the active ingredient at least one of the above compds. and serving as excellent immunosuppressants, anti-inflammatory agents, antiallergic agents and tumor metastasis inhibitors. Thus, 2-[[4-(benzothiazol-2-ylamino)benzoyl]amino]acetic acid di-Et ester was condensed with aminomalonic acid di-Et ester using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride hydrochloride in the presence of 4-dimethylaminopyridine and Et3N in DMF at room temperature for 18 h to give 2-{2-[[4-(benzothiazol-2-ylamino)benzoyl]amino]acetamido}malonic acid di-Et ester. 2-[2-[4-(Benzothiazol-2-ylamino)-2-methoxyphenoxy]acetamido]malonic acid di-Et ester inhibited by 100% the binding of U937 cells to human umbilical vein endothelial cells (HUVEC) which was treated with human interleukin 1β to induce the expression of ICAM-1.

IC ICM C07C235-20
ICS C07C227-06; C07C229-24; C07C231-02; C07D213-38; C07D215-38; C07D235-30; C07D239-42; C07D239-47; C07D239-48; C07D239-94; C07D277-42; C07D277-44; C07D277-68; C07D277-82; C07D333-54; C07D417-12; A61K031-225; A61K031-38; A61K031-415
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
ST malonic diester prepn cell adhesion inhibitor 456312 564312; ICAM1 binding leukocyte inhibitor benzothiazole; pyridine contg malonic diester prepn immunosuppressant 651234; quinoline contg malonic diester prepn antiallergic 651234; benzothiazole contg malonic diester prepn antiinflammatory 651234; pyrimidine contg malonic diester prepn antitumor 651234; quinazoline contg malonic diester prepn antiinflammatory; thienopyrimidine contg malonic diester prepn immunosuppressant; benzimidazole contg malonic diester prepn antiallergic
IT Cell adhesion molecules

RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(ICAM-1 (intercellular adhesion mol. 1); preparation of malonic diester derivs. as cell adhesion inhibitors)

IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(VCAM-1, binding of VCAM-1 to leukocytes, inhibitors; preparation of malonic diester derivs. as cell adhesion inhibitors)

IT Leukocyte
(binding of VCAM-1 to leukocytes, inhibitors; preparation of malonic diester derivs. as cell adhesion inhibitors)

IT Antitumor agents
(metastasis; preparation of malonic diester derivs. as cell adhesion inhibitors)

IT Allergy inhibitors
Anti-inflammatory agents
Cell adhesion
Immunosuppressants
(preparation of malonic diester derivs. as cell adhesion inhibitors)

IT 261348-29-2P 261348-30-5P 261348-31-6P 261348-32-7P 261348-33-8P
261348-34-9P 261348-35-0P 261348-36-1P 261348-37-2P 261348-38-3P
261348-39-4P 261348-40-7P 261348-41-8P 261348-42-9P 261348-43-0P
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261348-64-5P 261348-65-6P 261348-66-7P 261348-67-8P 261348-68-9P
261348-69-0P 261348-70-3P 261348-71-4P 261348-72-5P 261348-73-6P
261348-74-7P 261348-75-8P 261348-76-9P 261348-77-0P 261348-78-1P
261348-79-2P 261348-80-5P 261348-81-6P 261348-82-7P 261348-83-8P
261348-84-9P 261348-85-0P 261348-86-1P 261348-87-2P 261348-88-3P
261348-89-4P 261348-90-7P 261348-91-8P 261348-92-9P 261348-93-0P
261348-94-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of malonic diester derivs. as cell adhesion inhibitors)

IT 74-88-4, Iodomethane, reactions 98-88-4, Benzoyl chloride 104-03-0, 2-(4-Nitrophenoxy)acetic acid 136-95-8, 2-Aminobenzothiazole 615-20-3, 2-Chlorobenzothiazole 638-07-3, Ethyl 4-chloroacetoacetate 1762-95-4, Ammonium thiocyanate 6279-86-3, Triethoxycarbonylmethane 13433-00-6 16017-69-9 17508-17-7, O-(2,4-Dinitrophenyl)hydroxylamine 20485-38-5 24257-59-8 102831-44-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of malonic diester derivs. as cell adhesion inhibitors)

IT 532-55-8P, Benzoyl isothiocyanate 4921-90-8P 6829-40-9P 14294-12-3P 261348-95-2P 261348-96-3P 261348-97-4P 261348-98-5P 261348-99-6P 261349-00-2P 261349-01-3P 261349-02-4P 261349-03-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of malonic diester derivs. as cell adhesion inhibitors)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 130:196664 MARPAT
TITLE: Preparation of 4-phenylaminoquinazolin-6-ylamides and related compounds as tyrosine kinase inhibitors.
INVENTOR(S): Wissner, Allan; Tsou, Hwei-ru; Johnson, Bernard Dean; Hamann, Philip Ross; Zhang, Nan
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909016	A1	19990225	WO 1998-US15789	19980729
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
TW 436485	B	20010528	TW 1998-87112356	19980728
AU 9886023	A1	19990308	AU 1998-86023	19980729
AU 757418	B2	20030220		
EP 1000039	A1	20000517	EP 1998-937275	19980729
EP 1000039	B1	20040609		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
BR 9811805	A	20000815	BR 1998-11805	19980729
US 6251912	B1	20010626	US 1998-124365	19980729
JP 2001515071	T2	20010918	JP 2000-509699	19980729
RU 2227798	C2	20040427	RU 2000-105243	19980729
AT 268761	E	20040615	AT 1998-937275	19980729
PT 1000039	T	20040930	PT 1998-937275	19980729
ZA 9806905	A	20000131	ZA 1998-6905	19980731
NO 2000000487	A	20000331	NO 2000-487	20000131
NZ 519387	A	20040326	NZ 2002-519387	20020606
PRIORITY APPLN. INFO.:			US 1997-904942	19970801
			US 1997-55072P	19970801
			WO 1998-US15789	19980729
			NZ 2002-501885	20020606

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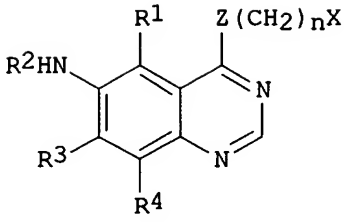

I

AB Title compds. [I; X = (substituted) cycloalkyl, pyridinyl, pyrimidinyl, Ph; Z = NH, O, S, NR; R = alkyl; R1, R3, R4 = H, halo, alkyl, alkenyl, alkynyl, alkenyloxy, alkynyloxy, CH2OH, halomethyl, alkanoyloxy, alkenoyloxy, alkynoyloxy, alkanoyloxymethyl, etc.; R2 = R5C.tplbond.CCO, (R5)2C:CR5CO, R5SS[C(R5)2]rCO, etc.; n = 0, 1; r = 1-4; R5 = H, CO2H, carboalkoxy, Ph, etc.], were prepared Thus, 4-dimethylamino-2-butynoic acid (preparation given) was stirred with iso-Bu chloroformate and N-methylmorpholine in THF with ice cooling; N-(3-bromophenyl)-4,6-quinazolinediamine in pyridine was added and the mixture was stirred 2 h at 0° to give 4-dimethylamino-2-butynoic acid [4-(3-bromophenylamino)quinazolin-6-yl]amide. The latter inhibited MB435 tumor cell growth with IC50 = 0.05 μg/mL.

IC ICM C07D239-94
ICS C07D405-12; A61K031-505

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST phenylaminoquinazolinylamide prepn tyrosine kinase inhibitor; quinazolinylamide bromophenylamino prepn tyrosine kinase inhibitor; anticancer phenylaminoquinazolinylamide prepn; polycystic kidney disease treatment phenylaminoquinazolinylamide prepn; epidermal growth factor receptor kinase inhibitor phenylaminoquinazolinylamide

IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(inhibitors; preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

IT Kidney, disease
(polycystic, treatment; preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

IT Antitumor agents
(preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

IT 80449-02-1, Tyrosine kinase
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(inhibitors; preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

IT 194423-06-8P 198960-08-6P 214486-59-6P 220699-38-7P 220699-39-8P
220699-40-1P 220699-41-2P 220699-42-3P 220699-43-4P 220699-45-6P
220699-46-7P 220699-47-8P 220699-48-9P 220699-49-0P 220699-51-4P
220699-52-5P 220699-53-6P 220699-55-8P 220699-56-9P 220699-57-0P
220699-58-1P 220699-60-5P 220699-62-7P 220699-65-0P 220699-66-1P

220699-67-2P 220699-68-3P 220699-70-7P 220699-72-9P 220699-73-0P
220699-75-2P 220699-78-5P 220699-80-9P 220699-81-0P 220699-84-3P
220699-86-5P 220699-88-7P 220699-90-1P 220699-91-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

IT 68-11-1, Mercaptoacetic acid, reactions 74-89-5, Methylamine, reactions 75-16-1, Methylmagnesium bromide 75-33-2, Isopropylmercaptan 75-66-1, tert-Butylmercaptan 79-42-5, 2-Mercaptopropionic acid 106-96-7, Propargyl bromide 107-30-2, Chloromethyl methyl ether 107-96-0 108-18-9, Diisopropylamine 108-31-6, 2,5-Furandione, reactions 109-01-3, 1-Methylpiperazine 109-86-4, Methoxyethanol 109-89-7, reactions 110-91-8, Morpholine, reactions 111-95-5 124-40-3, Dimethylamine, reactions 141-82-2, Malonic acid, reactions 513-44-0, Isobutylmercaptan 556-52-5, Oxiranemethanol 590-93-2, 2-Butynoic acid 591-19-5, 3-Bromoaniline 624-65-7, Propargyl chloride 627-41-8, Methyl propargyl ether 1117-71-1, Methyl 4-bromocrotonate 1622-32-8, 2-Chloroethylsulfonyl chloride 2949-92-0 3575-32-4 3721-35-5 4079-68-9, 1-Diethylamino-2-propyne 4224-69-5, Methyl 2-bromomethylacrylate 4637-24-5, Dmf dimethyl acetal 4747-21-1 5231-87-8 5308-25-8, 1-Ethylpiperazine 7223-38-3, 1-Dimethylamino-2-propyne 17420-30-3, 5-Nitroanthranilonitrile 38256-93-8, N-(2-Methoxyethyl)methylamine 61882-45-9, 4-Methoxycrotonyl chloride 74024-49-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

IT 503-11-7P, Oxiranecarboxylic acid 821-00-1P, 2,4-Hexadienamide 4432-44-4P 6323-87-1P 13280-03-0P 20629-35-0P 24303-64-8P, 4-Methoxybut-2-ynoic acid 38346-95-1P 39263-34-8P 45813-02-3P 58847-92-0P 59424-95-2P 60033-23-0P 76782-82-6P 102245-65-8P 118764-05-9P 138148-59-1P 143346-98-9P 156478-22-7P 169205-77-0P 169205-78-1P 194423-11-5P 194423-17-1P 194423-18-2P 214477-76-6P 214487-26-0P 214487-27-1P 214487-28-2P 214487-29-3P 220699-94-5P 220699-95-6P 220699-97-8P 220699-98-9P 220699-99-0P 220700-00-5P 220700-02-7P 220700-03-8P 220700-04-9P 220700-05-0P 220700-07-2P 220700-08-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 4-phenylaminoquinazolin-6-ylamides and related compds. as tyrosine kinase inhibitors)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 130:168387 MARPAT
TITLE: Irreversible inhibitors of tyrosine kinases
INVENTOR(S): Bridges, Alexander James
PATENT ASSIGNEE(S): Warner-Lambert Company, USA
SOURCE: PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9906378	A1	19990211	WO 1998-US15784	19980729
W: AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9887607	A1	19990222	AU 1998-87607	19980729
US 6127374	A	20001003	US 1999-269545	19990325
US 6562818	B1	20030513	US 2000-593031	20000613
PRIORITY APPLN. INFO.:			US 1997-54060P	19970729
			WO 1998-US15784	19980729
			US 1999-269545	19990325

AB Pyrimidine derivs. that are irreversible inhibitors of tyrosine kinases are reported. Thus, PhCH2OH was treated with 4-FC6H4NO2 to give 4-PhCH2OC6H4NO2, which was reduced to the amine and used to aminate 4-chloro-6-nitroquinazoline hydrochloride. The resulting 6-nitro-4-(4-benzyloxyanilino)quinazoline hydrochloride was reduced to the amine and acylated to give N-[4-(4-benzyloxyanilino)quinazolin-6-yl]acrylamide (I). I had an IC50 for inhibition of epidermal growth factor receptor tyrosine kinase of 3.6 nM.

IC ICM C07D239-74
ICS C07D239-88; C07D239-93; C07D239-94; C07D471-04; C07D487-04; C07D495-04; A61K031-505; C07D471-04; C07D239-00; C07D221-00; C07D487-04; C07D239-00; C07D239-00; C07D487-04; C07D239-00; C07D209-00; C07D495-04; C07D333-00; C07D239-00

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 7

ST pyrimidine prepn tyrosine kinase inhibitor; quinazolinylacrylamide prepn tyrosine kinase inhibitor

IT 220488-25-5P 220488-27-7P 220490-90-4P 220490-91-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of anilinoquinazolinylacrylamides and related compds. as tyrosine kinase inhibitors)

IT 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(preparation of anilinoquinazolinylacrylamides and related compds. as tyrosine kinase inhibitors)

IT 79-10-7, 2-Propenoic acid, reactions 100-51-6, Benzyl alcohol, reactions 108-95-2, Phenol, reactions 350-46-9, 1-Fluoro-4-nitrobenzene 220488-24-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of anilinoquinazolinylacrylamides and related compds. as tyrosine kinase inhibitors)

IT 101-63-3P 139-59-3P, 4-Phenoxyaniline 1145-76-2P 6373-46-2P, 4-Benzyloxyaniline 179247-03-1P 179247-04-2P 179247-07-5P 179247-08-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation of anilinoquinazolinylacrylamides and related compds. as tyrosine kinase inhibitors)

IT 220488-28-8P 220488-29-9P 220488-30-2P 220488-31-3P 220488-32-4P
220488-33-5P 220488-34-6P 220488-35-7P 220488-36-8P 220488-37-9P
220488-38-0P 220488-39-1P 220488-40-4P 220488-41-5P 220488-42-6P
220488-43-7P 220488-44-8P 220488-45-9P 220488-46-0P 220488-47-1P
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220490-60-8P 220490-61-9P 220490-62-0P 220490-63-1P 220490-65-3P
220490-66-4P 220490-67-5P 220490-68-6P 220490-69-7P 220490-70-0P
220490-72-2P 220490-74-4P 220490-76-6P 220490-78-8P 220490-79-9P
220490-80-2P 220490-81-3P 220490-82-4P 220490-83-5P 220490-84-6P
220490-86-8P 220490-87-9P 220490-88-0P 220490-89-1P 220491-03-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of anilinoquinazolinylacrylamides and related compds. as tyrosine kinase inhibitors)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 26 MARPAT COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 129:81964 MARPAT
TITLE: Preparation and use of ketobenzamides as calpain inhibitors
INVENTOR(S): Lubisch, Wilfried; Moller, Achim; Treiber, Hans-Jorg
PATENT ASSIGNEE(S): BASF A.-G., Germany; Lubisch, Wilfried; Moller, Achim; Treiber, Hans-Jorg
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9825883	A1	19980618	WO 1997-EP6655	19971128
W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2274464	AA	19980618	CA 1997-2274464	19971128
AU 9857523	A1	19980703	AU 1998-57523	19971128
AU 721620	B2	20000713		
EP 944582	A1	19990929	EP 1997-953714	19971128
EP 944582	B1	20030702		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
CN 1245486	A	20000223	CN 1997-181748	19971128
NZ 335981	A	20000428	NZ 1997-335981	19971128
BR 9713704	A	20000509	BR 1997-13704	19971128
JP 2001506614	T2	20010522	JP 1998-526156	19971128
RU 2190599	C2	20021010	RU 1999-115765	19971128
SK 282680	B6	20021106	SK 1999-745	19971128
AT 244216	E	20030715	AT 1997-953714	19971128
ES 2202663	T3	20040401	ES 1997-953714	19971128
HR 970680	B1	20020831	HR 1997-970680	19971210
ZA 9711141	A	19990611	ZA 1997-11141	19971211
TW 536530	B	20030611	TW 1997-86118865	19971211
US 6103720	A	20000815	US 1999-319511	19990608
NO 9902821	A	19990611	NO 1999-2821	19990610
KR 2000057495	A	20000915	KR 1999-705172	19990610
BG 63382	B1	20011231	BG 1999-103485	19990611
PRIORITY APPLN. INFO.:			DE 1996-19651316	19961211
			WO 1997-EP6655	19971128

AB The invention concerns ketobenzamides of formula R1X(R2)n-C6H3-CONHCH(R3)COCOR4 [(I) R1 = Ph, naphthyl, (substituted)(hetero)cycle; R2 = Cl, Br, F, NO2, NH2,NHR5, CO2H, (substituted)-alkyl, -alkenyl, -alkynyl, R5 = CO-alkyl, COPh, CO-C10H7, SO2-alkyl,CO-alkoxy, ureido, alkoxy; R3 = (substituted) alkyl; X = (substituted)(functionalized)chain from 0-10 atoms, or R2-substituted-C6H3; R4 = OH, (substituted)alkoxy, (substituted)NH2, heterocyclic ring], useful as calpain inhibitors. The invention further concerns their preparation The novel compds. are suitable for combating diseases. Thus, 3(S)-3-amino-2-hydroxy-4-phenylbutyric acid Me ester was condensed with 2-phenylbenzoic acid to give (S)-I [R1 = Ph; X = null; n = 0; R3 = CH2Ph;R4 = OMe(II)]. In in vitro calpain-inhibition tests, II had KI of <10μM.

IC ICM C07C233-87
ICS C07C311-21; C07D295-12; C07D295-02; C07D215-36; C07D241-42
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
ST ketobenzamide calpain inhibitor prepn
IT Drugs
(preparation and use of ketobenzamides as calpain inhibitors)
IT Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and use of ketobenzamides as calpain inhibitors)
IT 2243-83-6, 2-Naphthalenecarbonyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(pg preparation and use of ketobenzamides as calpain inhibitors)
IT 209173-56-8P 209173-58-0P 209173-67-1P 209173-69-3P 209173-71-7P
209173-74-0P 209173-78-4P 209173-87-5P 209173-89-7P 209173-91-1P
209173-96-6P 209174-01-6P 209174-04-9P 209174-06-1P 209174-09-4P
209174-14-1P 209174-16-3P 209174-18-5P 209174-22-1P 209174-24-3P
209174-27-6P 209174-30-1P 209174-35-6P 209174-40-3P 209174-47-0P
209174-52-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and use of ketobenzamides as calpain inhibitors)
IT 56-91-7 66-99-9, 2-Naphthalenecarboxaldehyde 93-11-8, 2-Naphthalenesulfonyl chloride 99-05-8 123-00-2, 4-Morpholinepropanamine 366-84-7 486-74-8, 4-Quinolinecarboxylic acid 582-33-2 623-33-6 827-54-3 947-84-2, [1,1'-Biphenyl]-2-carboxylic acid 2905-25-1 5036-48-6, 1H-Imidazole-1-propanamine 6091-64-1 6380-23-0 6480-68-8, 3-Quinolinecarboxylic acid 6925-00-4, 6-Quinoxalinecarboxylic acid 18704-37-5, 8-Quinolinesulfonyl chloride 19312-06-2 50541-93-0 54745-92-5, 2-Quinoxalinecarbonyl chloride 124358-24-3 149193-77-1 191849-93-1 209173-80-8 209174-37-8 209174-49-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and use of ketobenzamides as calpain inhibitors)
IT 5693-33-4P 7335-32-2P 33233-67-9P 79217-09-7P 90340-70-8P
107796-83-8P 157311-42-7P 186032-64-4P 205748-61-4P 205748-62-5P
208175-29-5P 208175-66-0P 209173-53-5P 209173-54-6P 209173-55-7P
209173-57-9P 209173-64-8P 209173-65-9P 209173-66-0P 209173-68-2P
209173-70-6P 209173-72-8P 209173-73-9P 209173-75-1P 209173-77-3P
209173-83-1P 209173-84-2P 209173-85-3P 209173-86-4P 209173-88-6P
209173-90-0P 209173-93-3P 209173-94-4P 209173-95-5P 209173-98-8P
209173-99-9P 209174-00-5P 209174-03-8P 209174-05-0P 209174-07-2P
209174-10-7P 209174-11-8P 209174-12-9P 209174-15-2P 209174-17-4P
209174-21-0P 209174-23-2P 209174-26-5P 209174-29-8P 209174-33-4P
209174-34-5P 209174-39-0P 209174-41-4P 209174-44-7P 209174-45-8P
209174-46-9P 209174-51-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and use of ketobenzamides as calpain inhibitors)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 26 MARPAT COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 129:40989 MARPAT
TITLE: Preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors
INVENTOR(S): Lubisch, Wilfried; Moeller, Achim; Treiber, Hans-Joerg
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 34 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19648793	A1	19980528	DE 1996-19648793	19961126
CA 2272388	AA	19980604	CA 1997-2272388	19971111
WO 9823581	A1	19980604	WO 1997-EP6292	19971111
W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9854814	A1	19980622	AU 1998-54814	19971111
AU 742262	B2	20011220		
EP 944584	A1	19990929	EP 1997-951172	19971111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
CN 1238761	A	19991215	CN 1997-180091	19971111
BR 9713147	A	20000208	BR 1997-13147	19971111
NZ 335542	A	20000728	NZ 1997-335542	19971111
JP 2001506596	T2	20010522	JP 1998-524208	19971111
RU 2189973	C2	20020927	RU 1999-113461	19971111
ZA 9710569	A	19990525	ZA 1997-10569	19971125
TW 393454	B	20000611	TW 1997-86117691	19971125
NO 9902492	A	19990525	NO 1999-2492	19990525
KR 2000057227	A	20000915	KR 1999-704582	19990525
US 6251917	B1	20010626	US 1999-297916	19990526
PRIORITY APPLN. INFO.:			DE 1996-19648793	19961126
			WO 1997-EP6292	19971111

AB R1Z1Z2CONHCHR3CHO [R1 = (un)substituted (hetero)aryl; R3 = [(hetero)aryl] hydrocarbyl; Z1 = bond, O, CO, alkylene, etc.; Z2 = (un)substituted phenylene] were prepared Thus, 2-PhC6H4CO2H was amidated by (S)-PhCH2CH(NH2)CH2OH and the product oxidized to give (S)-2-PhC6H4CONHCH(CH2Ph)CHO (I). Data for biol. activity of I were given.

IC ICM C07C233-42
ICS C07C311-21; C07C233-76; C07C235-84; C07C235-42; C07D215-36; C07C317-44; C07D213-56; C07C323-56; C07C323-25; A61K031-16; C12N009-99

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1

ST oxoethylbenzamide prepn cysteine protease inhibitor

IT Ischemia
(preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors)

IT 9004-08-4, Cathepsin 37353-41-6, Cysteine protease 78990-62-2, Calpain
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(mediated disorders; treatment; preparation of N-(2-oxoethyl)benzamides as
cysteine protease inhibitors)

IT 186030-93-3P 208174-52-1P 208174-53-2P 208174-54-3P 208174-55-4P
208174-56-5P 208174-57-6P 208174-58-7P 208174-59-8P 208174-62-3P
208174-65-6P 208174-68-9P 208174-71-4P 208174-74-7P 208174-77-0P
208174-78-1P 208174-79-2P 208174-80-5P 208174-81-6P 208174-82-7P
208174-83-8P 208174-84-9P 208174-85-0P 208174-86-1P 208174-87-2P
208174-88-3P 208174-89-4P 208174-90-7P 208174-91-8P 208174-92-9P
208174-93-0P 208174-94-1P 208174-95-2P 208174-96-3P 208174-97-4P
208174-98-5P 208174-99-6P 208175-00-2P 208175-01-3P 208175-02-4P
208175-03-5P 208175-04-6P 208175-05-7P 208175-06-8P 208175-07-9P
208175-08-0P 208175-09-1P 208175-10-4P 208175-11-5P 208175-12-6P
208175-14-8P 208175-16-0P 208175-18-2P 208175-20-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors)

IT 56-91-7, 4-Aminomethylbenzoic acid 66-99-9, 2-Naphthaldehyde 85-52-9, 2-Benzoylbenzoic acid 91-60-1, Naphthalene-2-thiol 93-08-3, 2-Acetylnaphthalene 93-11-8, 2-Naphthalenesulfonyl chloride 94-09-7, Ethyl 4-aminobenzoate 96-20-8, 2-Amino-1-butanol 96-98-0 98-09-9, Benzenesulfonyl chloride 99-05-8, 3-Aminobenzoic acid 99-76-3 100-42-5, reactions 118-48-9, Isatoic anhydride 119-36-8, Methyl salicylate 121-90-4, 3-Nitrobenzoyl chloride 150-13-0 536-74-3, Phenylacetylene 579-18-0, 3-Benzoylbenzoic acid 581-96-4, 2-Naphthaleneacetic acid 582-33-2, Ethyl 3-aminobenzoate 611-95-0, 4-Benzoylbenzoic acid 619-17-0, 2-Amino-4-nitrobenzoic acid 619-21-6, 3-Formylbenzoic acid 724-98-1, 2-Phenoxymethylbenzoic acid 827-54-3, 2-Vinylnaphthalene 879-18-5, 1-Naphthoyl chloride 939-26-4, 2-Bromomethylnaphthalene 947-84-2, 2-Phenylbenzoic acid 1571-08-0, Methyl 4-formylbenzoate 1975-52-6, 2-Methyl-5-nitrobenzoic acid 2243-42-7, 2-Phenoxybenzoic acid 2243-83-6, 2-Naphthoyl chloride 3113-71-1, 3-Methyl-4-nitrobenzoic acid 3182-95-4, (S)-2-Amino-3-phenyl-1-propanol 3569-21-9, 3-(3-Indolyl)-1-propanol 4692-99-3, 5-MethylIsatoic anhydride 4890-85-1, 2-Phenethylbenzoic acid 6091-64-1, Ethyl 2-bromobenzoate 6380-23-0 7745-93-9, 2-Bromo-4-nitrotoluene 16369-14-5, 2-Amino-1-pentanol 17082-09-6 18704-37-5, 8-Quinolinesulfonyl chloride 19312-06-2, 4,4-Dimethyl-2-phenyl-2-oxazoline 20260-53-1, Nicotinoyl chloride hydrochloride 55810-66-7, 2-Benzylbenzoyl chloride 131288-67-0, (S)-2-Amino-3-cyclohexyl-1-propanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors)

IT 1084-95-3P, 2-Phenylethynyl)benzoic acid 5693-33-4P 16426-64-5P, 2-Bromo-4-nitrobenzoic acid 28547-16-2P 60901-21-5P 71862-53-8P 71862-55-0P 87717-18-8P 89113-18-8P 95280-70-9P 107796-83-8P 110166-71-7P, Ethyl 2-phenylethynyl)benzoate 116834-64-1P 128566-93-8P, Ethyl 2-Bromo-4-nitrobenzoate 148066-83-5P 186032-64-4P 208175-22-8P 208175-24-0P 208175-25-1P 208175-27-3P 208175-29-5P 208175-31-9P 208175-33-1P 208175-35-3P 208175-37-5P 208175-39-7P 208175-41-1P 208175-43-3P 208175-45-5P 208175-47-7P 208175-49-9P 208175-51-3P 208175-52-4P 208175-53-5P 208175-54-6P 208175-55-7P 208175-56-8P 208175-57-9P 208175-58-0P 208175-59-1P 208175-60-4P 208175-61-5P 208175-62-6P 208175-63-7P 208175-64-8P 208175-65-9P 208175-66-0P 208175-67-1P 208175-68-2P 208175-69-3P 208175-70-6P

208175-71-7P 208175-72-8P 208175-73-9P 208175-74-0P 208175-75-1P
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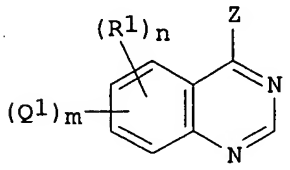
208175-82-0P 208175-83-1P 208175-84-2P 208175-85-3P 208175-87-5P
208175-89-7P 208175-90-0P 208175-92-2P 208175-95-5P 208175-97-7P
208175-99-9P 208176-01-6P 208176-03-8P 208176-04-9P 208176-05-0P
208176-06-1P 208176-07-2P 208176-08-3P 208176-09-4P 208176-10-7P
208176-11-8P 208176-12-9P 208176-13-0P 208176-14-1P 208176-15-2P
208176-16-3P 208176-17-4P 208176-18-5P 208176-19-6P 208176-20-9P
208176-21-0P 208176-22-1P 208176-23-2P 208176-24-3P 208176-25-4P
208176-26-5P 208176-27-6P 208176-28-7P 208176-29-8P 208176-30-1P
208176-31-2P 208176-32-3P 208176-33-4P 208176-34-5P 208176-35-6P
208176-36-7P 208176-37-8P 208176-38-9P 208176-39-0P 208176-40-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors)

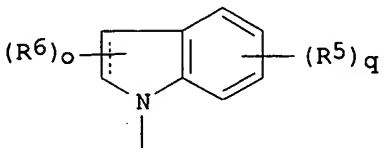
L13 ANSWER 18 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 128:294788 MARPAT
TITLE: 4-Aminoquinazoline derivatives for treatment of hyperproliferative disorders or conditions in mammals
INVENTOR(S): Arnold, Lee Daniel; Sobolov-Jaynes, Susan Beth
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 837063	A1	19980422	EP 1997-307724	19971001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2218945	AA	19980417	CA 1997-2218945	19971015
JP 10152477	A2	19980609	JP 1997-284872	19971017
JP 3457164	B2	20031014		
BR 9705088	A	19990720	BR 1997-5088	19971017

PRIORITY APPLN. INFO.: US 1996-28881P 19961017
GI



I



II

AB The title compds. I [R1 = CF3, halo, OH, etc.; Q1 = ArYX; Ar = monocyclic or bicyclic aryl or heteroaryl ring; X = C2 alkene, C2 alkyne or absent; Y = (CH2)p, wherein one or two of the CH2 groups may be replaced by either O, S, SO2, CO, NH or NMe; Z = NR3R4; R3 = H; R4 = Q2, Ph substituted by R5q, or NR3R4 = II, wherein the dotted line represents an optional double

bond; m = 1, 2; n = 0, 1, 2, 3; o = 0, 1, 2; p= 0-5; q = 0-3 integer] and their pharmaceutically acceptable salts are prepared Thus, heating (1H-indol-5-yl)-(6-iodo-7-methoxyquinazolin-4-yl)amine with 4-vinylpyridine, Pd acetate and NEt3 in MeCN gave (1H-indol-5-yl)-[7-methoxy-6-(2-pyridin-4-yl-vinyl)quinazolin-4-yl]amine.

IC ICM C07D403-12
ICS A61K031-505; C07D239-88; C07D401-14; C07D401-06

ICI C07D403-12, C07D239-00, C07D209-00

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

ST hyperproliferative disorder aminoquinazoline deriv treatment; cancer aminoquinazoline deriv treatment; pyridinylvinyl quinazolinylamine prepn

IT Neoplasm
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Prostate gland
(benign hyperplasia; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(bladder carcinoma; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(brain; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Bladder
(carcinoma, inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Esophagus
(disease, inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(head; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Skin, disease
(hyperplasia; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Brain, neoplasm
Lung, neoplasm
Pancreas, neoplasm
Pancreas, neoplasm
Stomach, neoplasm
Thyroid gland, neoplasm
Thyroid gland, neoplasm
(inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(lung; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(mammary gland; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(neck; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Head
Head
Mammary gland
Neck, anatomical

Neck, anatomical
(neoplasm, inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
Antitumor agents
(pancreas; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
(stomach; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Antitumor agents
Antitumor agents
(thyroid; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT 206190-31-0P 206190-32-1P 206190-33-2P 206190-34-3P 206190-35-4P
206190-36-5P 206190-37-6P 206190-38-7P 206190-39-8P 206190-40-1P
206190-41-2P 206190-42-3P 206190-43-4P 206190-45-6P 206190-46-7P
206190-47-8P 206190-48-9P 206190-49-0P 206190-50-3P 206190-51-4P
206190-52-5P 206190-55-8P 206190-57-0P 206190-59-2P 206190-61-6P
206190-63-8P 206190-65-0P 206190-67-2P 206190-70-7P 206190-72-9P
206190-74-1P 206190-76-3P 206190-79-6P 206190-82-1P 206190-84-3P
206190-86-5P 206190-89-8P 206190-91-2P 206190-95-6P 206190-96-7P
206190-99-0P 206191-02-8P 206191-03-9P 206191-05-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT 98-80-6, Phenylboronic acid 100-43-6, 4-Vinylpyridine 109-04-6, 2-Bromopyridine 536-74-3, Ethynylbenzene 555-57-7 1066-54-2, Trimethylsilyl acetylene 1945-84-2, 2-Ethynylpyridine 5192-03-0, 5-Aminoindole 16064-08-7 50413-30-4 52537-00-5, 6-Chloroindoline 54060-30-9, 3-Ethynylaniline 55777-84-9, Bromoaniline 131379-16-3 157837-31-5 163105-90-6 183158-31-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT 206190-21-8P 206190-25-2P 206190-26-3P 206190-27-4P 206190-28-5P
206190-29-6P 206190-30-9P 206191-04-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

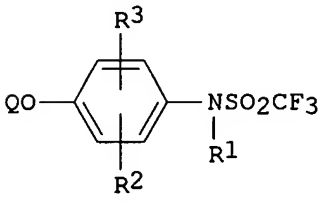
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 128:167414 MARPAT
TITLE: Preparation of thiazolyloxyphenylmethanesulfonamides as herbicides
INVENTOR(S): Sato, Kazuo; Kudo, Noriaki; Honma, Toyokuni; Isarai, Kiyoshi; Kadotani, Junji
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007657	A2	19980113	JP 1996-158177	19960619

PRIORITY APPLN. INFO.: JP 1996-158177 19960619

GI



I

AB Sulfonamides I (R1 = H, C2-6 alkanoyl, benzoyl; R2, R3 = H, halo, NO2, cyano, (substituted) lower alkyl, (substituted) lower alkoxy, etc.; R2R3 may form Ph or naphthalene; Q = (substituted) pyrazinyl, (substituted) 4-pyrimidinyl, (substituted) oxazolyl, (substituted) thiazolyl, (substituted) quinoxalyl, (substituted) quinazolyl, etc.; if Q = thiazolyl and R2 = R3, then R2 = R3 ≠ H) are prepared 2-(4-Amino-3-methoxycarbonylphenoxy)-4-chloro-5-difluoromethylthiazole was amidated with F3CSO3H in the presence of Et3N in CH2Cl2 under ice-cooling for 30 min, decomposed with NaOH in THF-H2O at room temperature for 1 h to give 86% I (R1 = H, R2 = 2-CO2Me, R3 = H, Q = 4-chloro-5-difluoromethyl-2-thiazolyl) (II). II at 5 g/a preemergence controlled 91-100% Echinochloa oryzicola and broadleaf weeds, 71-90% Scirpus juncoides, and 31-50% Cyperus serotinous growth without damaging rice plants.

IC ICM C07D231-18
ICS A01N047-04; C07D239-34; C07D239-80; C07D241-18; C07D241-44; C07D249-12; C07D251-22; C07D253-06; C07D257-04; C07D263-38; C07D263-58; C07D277-34; C07D277-68; C07D285-08; C07D285-10; C07D285-12

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 5

ST phenylmethanesulfonamide prepn herbicide

IT Herbicides
(preparation of phenylmethanesulfonamides as herbicides)

IT 202752-37-2 202752-38-3 202752-39-4 202752-40-7 202752-41-8
202752-42-9 202752-43-0 202752-44-1 202752-45-2 202752-46-3
202752-47-4 202752-48-5 202752-49-6 202752-50-9 202752-51-0
202752-52-1 202752-53-2 202752-54-3 202752-55-4 202752-56-5
202752-57-6 202752-58-7 202752-59-8 202752-60-1 202752-61-2
202752-62-3 202752-63-4 202752-64-5 202752-65-6 202752-66-7
202752-67-8 202752-68-9 202752-69-0 202752-70-3 202752-71-4
202752-72-5 202752-73-6 202752-74-7 202752-75-8 202752-76-9
202752-77-0 202752-78-1 202752-79-2 202752-80-5 202752-81-6
202752-82-7 202752-83-8 202752-85-0 202752-86-1 202752-87-2
202752-88-3 202752-89-4 202752-90-7 202752-91-8 202752-92-9
202752-93-0 202752-94-1 202752-95-2 202752-96-3 202752-97-4
202752-98-5 202752-99-6 202753-00-2 202753-01-3 202753-02-4
202753-03-5 202753-04-6 202753-05-7 202753-06-8 202753-07-9

202753-08-0 202753-09-1 202753-10-4 202753-11-5 202753-12-6
202753-13-7 202753-14-8 202753-15-9 202753-16-0 202753-17-1
202753-18-2 202753-19-3 202753-20-6 202753-21-7 202753-22-8
202753-23-9 202753-24-0 202753-25-1 202753-26-2 202753-27-3
202753-28-4 202753-29-5 202753-30-8 202753-31-9 202753-32-0
202753-33-1
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(preparation of phenylmethanesulfonamides as herbicides)

IT 202752-34-9P 202752-35-0P 202752-36-1P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylmethanesulfonamides as herbicides)

IT 79-03-8, Propionyl chloride 491-11-2, 3-Chloro-4-nitrophenol 1882-72-0, 4-Amino-3-methoxycarbonylphenol 105315-43-3 202752-31-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of phenylmethanesulfonamides as herbicides)

IT 202752-29-2P 202752-30-5P 202752-32-7P 202752-33-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of phenylmethanesulfonamides as herbicides)

L13 ANSWER 20 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 128:140716 MARPAT
TITLE: Preparation of azolylquinazolines and related compounds as protein tyrosine kinase inhibitors.
INVENTOR(S): Cockerill, George Stuart; Carter, Malcolm Clive; Guntrip, Stephen Barry; Smith, Kathryn Jane
PATENT ASSIGNEE(S): Glaxo Group Limited, UK; Cockerill, George Stuart; Carter, Malcolm Clive; Guntrip, Stephen Barry; Smith, Kathryn Jane
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9802434	A1	19980122	WO 1997-EP3672	19970711
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9706147	A	19990111	ZA 1997-6147	19970710
AU 9737668	A1	19980209	AU 1997-37668	19970711
EP 912559	A1	19990506	EP 1997-934458	19970711
EP 912559	B1	20021106		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

	IE, FI				
	JP 2000514806	T2	20001107	JP 1998-505596	19970711
	AT 227283	E	20021115	AT 1997-934458	19970711
	PT 912559	T	20030331	PT 1997-934458	19970711
	ES 2186908	T3	20030516	ES 1997-934458	19970711
	US 6391874	B1	20020521	US 1998-214267	19981231
	US 2002147214	A1	20021010	US 2002-62647	20020131
	US 6828320	B2	20041207		
PRIORITY APPLN. INFO.:				GB 1996-14755	19960713
				GB 1996-25458	19961207
				WO 1997-EP3672	19970711
				US 1998-214267	19981231

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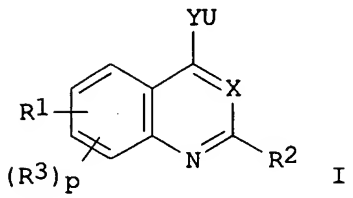

I

AB Title compds. [I; U = substituted Ph, mono- or bicyclic 5-10 membered (hetero)cyclyl; X = N, CH; Y = W(CH2), (CH2)W, W; W = O, S(O)m, NRa; Ra = H, alkyl; m = 0-2; R1 = (substituted) Ph, 5- or 6-membered heterocyclyl containing 1-4 heteroatoms selected from N, O, S(O)m; with the provision that the ring does not contain two adjacent O or S(O)m atoms and that where the ring contains only N as heteroatom(s) the ring is C-linked to the quinazoline or quinoline ring; R3 = H, amino, halo, OH, NO2, CO2H, CHO, cyano, CF3, OCF3, carbamoyl, alkoxycarbonyl, Ph, PhO, pyridonyl, pyrrolidinyl, imidazolyl, dioxolanyl, arylsulfonyl, alkylsulfonyl, alkylcarbamoylalkyl, piperidinoalkoxy, thiomorpholino, etc.; 2 adjacent R3 = methylenedioxy, ethylenedioxy; p = 0-3], were prepared Thus, (S)-1-[5-[4-(1-benzyl-1H-indazol-5-ylamino)quinazolin-6-yl]furan-2-ylmethyl]pyrrolidine-2-carboxylic acid amide dihydrochloride (preparation given) inhibited BT474 human breast cancer cell proliferation with IC50 = 2 nM.

IC ICM C07D405-04
ICS A61K031-505; C07D409-04; C07D401-04; C07D403-04; C07D405-14; C07D401-14; C07D413-04; C07D413-14

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

ST azolylquinazoline prepn protein tyrosine kinase inhibitor; neoplasm inhibitor azolylquinazoline; psoriasis treatment azolylquinazoline

IT Antitumor agents
(preparation of azolylquinazolines and related compds. as protein tyrosine kinase inhibitors)

IT Psoriasis
(treatment; preparation of azolylquinazolines and related compds. as protein

tyrosine kinase inhibitors)

IT 80449-02-1P, Protein tyrosine kinase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitors; preparation of azolylquinazolines and related compds. as protein tyrosine kinase inhibitors)

IT 202196-33-6P 202196-36-9P 202196-38-1P 202196-41-6P 202196-42-7P
202196-43-8P 202196-44-9P 202196-45-0P 202196-46-1P 202196-47-2P
202196-48-3P 202196-49-4P 202196-50-7P 202196-51-8P 202196-52-9P
202196-53-0P 202196-54-1P 202196-55-2P 202196-56-3P 202196-57-4P
202196-58-5P 202196-59-6P 202196-60-9P 202196-61-0P 202196-62-1P
202196-63-2P 202196-64-3P 202196-65-4P 202196-66-5P 202196-67-6P
202196-68-7P 202196-69-8P 202196-70-1P 202196-71-2P 202196-72-3P
202196-73-4P 202196-74-5P 202196-75-6P 202196-76-7P 202196-77-8P
202196-78-9P 202196-79-0P 202196-80-3P 202196-81-4P 202196-82-5P
202196-83-6P 202196-84-7P 202196-85-8P 202196-86-9P 202196-87-0P
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202196-98-3P 202196-99-4P 202197-00-0P 202197-01-1P 202197-02-2P
202197-03-3P 202197-04-4P 202197-05-5P 202197-06-6P 202197-07-7P
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202197-23-7P 202197-24-8P 202197-80-6P 202197-81-7P 202197-82-8P
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202198-03-6P 202198-04-7P 202198-05-8P 202198-06-9P 202198-07-0P
202198-08-1P 202198-09-2P 202198-10-5P 202198-11-6P 202198-12-7P
202198-13-8P 202198-14-9P 202198-15-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of azolylquinazolines and related compds. as protein tyrosine
kinase inhibitors)

IT 78-39-7, Triethyl orthoacetate 88-14-2, 2-Furoic acid 89-87-2
96-32-2, Methyl bromoacetate 99-56-9, 4-Nitro-o-phenylenediamine
103-71-9, Phenyl isocyanate, reactions 103-82-2, Phenylacetic acid, reactions 108-15-6 109-01-3, 1-Methylpiperazine 123-83-1 139-59-3, 4-Phenoxyaniline 288-32-4, Imidazole, reactions 407-25-0, Trifluoroacetic anhydride 462-08-8, 3-Aminopyridine 873-74-5, 4-Cyanoaniline 1001-53-2, N-Acetylethylenediamine 1066-54-2, Trimethylsilylacetylene 3143-02-0, 3-Methyl-3-oxetanemethanol
3680-02-2, Methyl vinyl sulfone 3853-06-3, Methyl 3-dimethylaminopropionate 4403-36-5 4455-13-4, Ethyl 2-methylthioacetate
4455-15-6, Ethyl 2-methylsulfonylacetate 4795-29-3, Tetrahydrofurfurylamine 5401-94-5, 5-Nitroindazole 5407-04-5
6146-52-7, 5-Nitroindole 6373-46-2, 4-Benzyloxyaniline 7019-01-4
7148-06-3, N,N-Dimethylglycine methyl ester 7531-52-4, L-Prolinamide
10312-55-7 13507-15-8 16064-08-7 17997-47-6, 2-Tributylstannylpyridine 18542-42-2, 2-Methylthioethylamine 22059-22-9, Acetamide oxime 38267-96-8 39021-62-0 39998-25-9, Methyl 3-pyridineacetate 41979-39-9, 4-Piperidone hydrochloride 49773-20-8,

2-Methylsulfonylethylamine 54663-78-4, 2-Tributylstannylthiophene
61516-73-2 79110-05-7 83019-89-0 86051-75-4 90004-09-4
94012-20-1 94987-87-8 98556-31-1, 4-Chloro-6-iodoquinazoline
104458-24-4 105494-69-7 116956-07-1 118486-94-5 118486-97-8
118505-28-5 125769-77-9 139696-74-5 147716-03-8 153435-63-3
170681-98-8 179248-66-9 181178-84-7 202198-16-1 202198-17-2
202198-18-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of azolylquinazolines and related compds. as protein tyrosine
kinase inhibitors)

IT 4315-09-7P, 4-Nitro-1,3-benzenedicarboxylic acid 4443-23-6P 7189-72-2P
23856-20-4P 23856-21-5P 26807-73-8P 33890-03-8P,
4-Amino-1,3-benzenedicarboxylic acid 33986-75-3P 53234-85-8P,
4-(4-Fluorobenzyloxy)aniline 57181-83-6P 59404-86-3P,
4-Benzyloxy-3-chloroaniline 61394-58-9P 65795-95-1P,
1-Benzyl-5-nitroindole 89756-60-5P 99767-45-0P, 2-Amino-5-cyanobenzoic acid 102137-46-2P 105350-42-3P 105350-44-5P 108281-61-4P
116119-53-0P 117297-41-3P 133538-63-3P 166252-92-2P 179246-45-8P,
3-Chloro-4-(2-Fluorobenzyloxy)aniline 179246-97-0P 179246-99-2P
187668-23-1P 202197-25-9P, 4-(3-Fluorobenzyloxy)aniline 202197-26-0P
202197-27-1P 202197-28-2P 202197-29-3P 202197-30-6P 202197-31-7P
202197-32-8P 202197-33-9P 202197-34-0P 202197-35-1P 202197-36-2P
202197-37-3P 202197-38-4P 202197-39-5P 202197-40-8P 202197-41-9P
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202197-67-9P 202197-68-0P 202197-69-1P 202197-70-4P 202197-71-5P
202197-72-6P 202197-73-7P 202197-74-8P 202197-75-9P 202197-76-0P
202197-77-1P 202197-78-2P 202197-79-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azolylquinazolines and related compds. as protein tyrosine
kinase inhibitors)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 127:248122 MARPAT
TITLE: Quinazoline derivatives as antitumor agents
INVENTOR(S): Barker, Andrew John; Johnstone, Craig
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

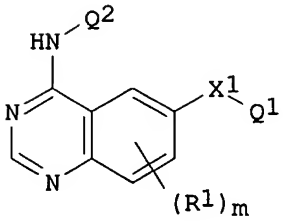
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9730034	A1	19970821	WO 1997-GB344	19970210

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2242102	AA	19970821	CA 1997-2242102	19970210
AU 9716126	A1	19970902	AU 1997-16126	19970210
AU 707339	B2	19990708		
EP 880507	A1	19981202	EP 1997-902496	19970210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1211240	A	19990317	CN 1997-192242	19970210
JP 2000504713	T2	20000418	JP 1997-529073	19970210
NZ 330816	A	20000526	NZ 1997-330816	19970210
IL 125685	A1	20021110	IL 1997-125685	19970210
ZA 9701231	A	19970814	ZA 1997-1231	19970213
US 5866572	A	19990202	US 1997-796483	19970213
NO 9803707	A	19981013	NO 1998-3707	19980813
US 6399602	B1	20020604	US 1998-152070	19980911
US 2003018029	A1	20030123	US 2002-136276	20020502
PRIORITY APPLN. INFO.:			GB 1996-3095	19960214
			WO 1997-GB344	19970210
			US 1997-796483	19970213
			US 1998-152070	19980911

GI



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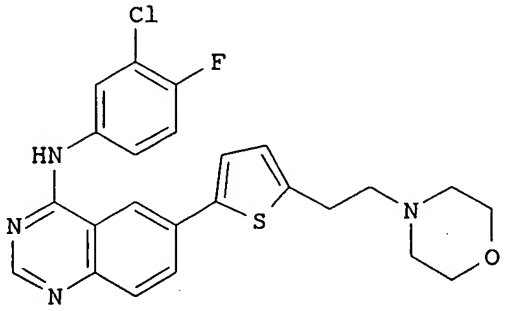

II

AB The invention concerns quinazoline derivs. I [X1 = bond, CO, C(R2)2, CH(OR2), S, C.tplbond.C, O, S, etc.; Q1 = Ph, naphthyl, or 5- or 6-membered heteroaryl optionally bearing 1-3 substituents; m = 1 or 2; R1 = H, halo, CF3, OH, NH2, cyano, etc.; R2 = H, alkyl; Q2 = Ph or 9- or 10-membered bicyclic heterocycle optionally bearing 1-3 substituents] and their pharmaceutically acceptable salts. Also disclosed are processes for preparation of I and salts, pharmaceutical compns. containing them, and the use of their receptor tyrosine kinase inhibitory properties in the treatment of proliferative diseases such as cancer. Examples include syntheses of 40 compds. and various intermediates. For instance, Pd(PPh3)4-catalyzed coupling of 6-bromo-4-(3-chloro-4-fluoroanilino)quinazoline-HCl with di-iso-Pr [5-(2-morpholinoethyl)thien-2-yl]boronate (prepns. given) gave 27% title compound II. At 50 mg/kg/day in athymic nude mice with human

vulval epidermoid carcinoma xenografts (cell line A-431), II gave 64% inhibition of tumor volume (vs. control) after 13 days.

IC ICM C07D239-94
ICS A61K031-505; C07D401-04; C07D403-04; C07D405-04; C07D407-04; C07D409-04; C07D411-04; C07D413-14; C07D409-12; C07D411-12; C07D403-12; C07D401-12; C07D407-12; C07D409-14

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST quinazoline prepn antitumor antiproliferative; receptor tyrosine kinase inhibitor quinazoline prepn

IT Antiarteriosclerotics
(antiatherosclerotics; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT Prostate gland
(benign hyperplasia, treatment; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT Artery, disease
(coronary, restenosis, treatment; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT Antitumor agents
(preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT Proliferation inhibition
(proliferation inhibitors; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT Psoriasis
(treatment; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT 127407-08-3, Receptor tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(inhibitors; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT 32084-59-6P, 6-Bromo-3,4-dihydroquinazolin-4-one 143417-09-8P, N-[2-(2-Thienyl)acetyl]morpholine 179687-10-6P, 5-Nitro-2-tolyl 2-pyridylmethyl ether 179687-13-9P, 5-Amino-2-tolyl 2-pyridylmethyl ether 179688-52-9P, 6-Hydroxy-7-methoxy-3,4-dihydroquinazolin-4-one 179688-53-0P, 6-Acetoxy-7-methoxy-3,4-dihydroquinazolin-4-one 184356-50-1P, 4-(3-Chloro-4-fluoroanilino)-6-nitroquinazoline 184356-51-2P, 6-Amino-4-(3-chloro-4-fluoroanilino)quinazoline 184358-80-3P, 6-Acetoxy-4-(3-chloro-4-fluoroanilino)quinazoline 184358-81-4P, 4-(3-Chloro-4-fluoroanilino)-6-hydroxyquinazoline 184475-70-5P, 6-Acetoxy-4-(3-chloro-4-fluoroanilino)-7-methoxyquinazoline hydrochloride 184475-71-6P, 4-(3-Chloro-4-fluoroanilino)-6-hydroxy-7-methoxyquinazoline 194851-19-9P, 4-Bromo-2-(morpholinomethyl)thiophene 195457-53-5P, 6-Bromo-4-(3-chloro-4-fluoroanilino)quinazoline hydrochloride 195457-54-6P, 2-(2-Morpholinoethyl)thiophene 195457-55-7P, Diisopropyl [5-(2-morpholinoethyl)thien-2-yl]boronate 195457-56-8P, Diisopropyl [5-(morpholinomethyl)thien-3-yl]boronate 195457-57-9P, 4-(3-Chloro-4-fluoroanilino)-6-[2-(trimethylsilyl)ethynyl]quinazoline 195457-58-0P, 4-(3-Chloro-4-fluoroanilino)-6-ethynylquinazoline 195457-59-1P, 6-Acetyl-4-(3-chloro-4-fluoroanilino)quinazoline 195457-60-4P, 6-(2-Chloroacetyl)-4-(3-chloro-4-fluoroanilino)quinazoline 195457-61-5P, 6-Bromo-4-(3-chloro-4-fluoroanilino)quinazoline 195457-62-6P, 6-Bromo-4-[3-methyl-4-(2-

pyridylmethoxy)anilino]quinazoline dihydrochloride
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT 195457-13-7P, 4-(3-Chloro-4-fluoroanilino)-6-(4-cyanophenyl)quinazoline 195457-30-8P, 4-(3-Chloro-4-fluoroanilino)-6-(2-thienylcarboxamido)quinazoline hydrochloride 195457-32-0P, 4-(3-Chloro-4-fluoroanilino)-6-(2-furylcarboxamido)quinazoline 195457-37-5P, 4-(3-Chloro-4-fluoroanilino)-6-(4-cyanophenoxy)quinazoline 195457-38-6P, 4-(3-Chloro-4-fluoroanilino)-6-(4-nitrophenoxy)quinazoline 195457-39-7P, 6-(4-Aminophenoxy)-4-(3-chloro-4-fluoroanilino)quinazoline 195457-41-1P, 6-[4-(Aminomethyl)phenoxy]-4-(3-chloro-4-fluoroanilino)quinazoline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT 195457-14-8P, 4-(3-Methylanilino)-6-phenylquinazoline 195457-15-9P, 6-[4-(Aminomethyl)phenyl]-4-(3-chloro-4-fluoroanilino)quinazoline 195457-16-0P, 4-(3-Chloro-4-fluoroanilino)-6-(3-furyl)quinazoline 195457-17-1P, 4-(3-Chloro-4-fluoroanilino)-6-(2-furyl)quinazoline 195457-18-2P, 4-(3-Chloro-4-fluoroanilino)-6-(2-thienyl)quinazoline 195457-19-3P, 4-(3-Chloro-4-fluoroanilino)-6-(3-thienyl)quinazoline 195457-20-6P, 4-(3-Chloro-4-fluoroanilino)-6-[5-(2-morpholinoethyl)thien-2-yl]quinazoline 195457-21-7P, 4-(3-Chloro-4-fluoroanilino)-6-[5-(morpholinomethyl)thien-3-yl]quinazoline 195457-22-8P, 4-(3-Chloro-4-fluoroanilino)-6-(4-imidazolyl)quinazoline 195457-23-9P, 4-(3-Chloro-4-fluoroanilino)-6-(2-pyridyl)quinazoline 195457-24-0P, 4-(3-Chloro-4-fluoroanilino)-6-(3-pyridyl)quinazoline 195457-25-1P, 4-(3-Chloro-4-fluoroanilino)-6-(4-quinazolinylamino)quinazoline dihydrochloride 195457-26-2P, 6-(2-Imidazolylamino)-4-(3-methylanilino)quinazoline 195457-27-3P, 4-(3-Methylanilino)-6-[(1-methylimidazol-4-yl)sulfonamido]quinazoline 195457-28-4P, 4-(3-Methylanilino)-6-[(3-thienylmethyl)amino]quinazoline 195457-29-5P, 6-[(2-Imidazolylmethyl)amino]-4-(3-methylanilino)quinazoline 195457-31-9P, 4-(3-Chloro-4-fluoroanilino)-6-[(2-thienylmethyl)amino]quinazoline 195457-33-1P, 4-(3-Chloro-4-fluoroanilino)-6-(furfurylamino)quinazoline 195457-34-2P, 4-(3-Chloro-4-fluoroanilino)-6-(5-isoxazolylcarboxamido)quinazoline hydrochloride 195457-35-3P, 4-(3-Chloro-4-fluoroanilino)-6-(1,2,3-triazol-4-ylcarboxamido)quinazoline 195457-36-4P, 4-(3-Chloro-4-fluoroanilino)-7-(methylamino)-6-(3-pyridylcarboxamido)quinazoline 195457-40-0P, 4-(3-Chloro-4-fluoroanilino)-6-phenoxyquinazoline 195457-42-2P, 4-(3-Chloro-4-fluoroanilino)-6-[4-(morpholinomethyl)phenoxy]quinazoline 195457-43-3P, 6-(1-Imidazolylmethyl)-4-(3-methylanilino)quinazoline 195457-44-4P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-6-(2-pyridylmethoxy)quinazoline 195457-45-5P, 4-(3-Chloro-4-fluoroanilino)-7-methoxy-6-(3-pyridylmethoxy)quinazoline 195457-46-6P, 4-(3-Methylanilino)-6-[(1,2,3-triazol-4-ylthio)methyl]quinazoline 195457-47-7P, 4-(3-Methylanilino)-6-[[(N-methylimidazol-2-yl)thio]methyl]quinazoline 195457-48-8P, 6-[(2-Imidazolylthio)methyl]-4-(3-methylanilino)quinazoline 195457-49-9P, 6-[(2-Benzimidazolylthio)methyl]-4-(3-

methylanilino)quinazoline 195457-50-2P, 4-[3-Methyl-4-(2-pyridylmethoxy)anilino]-6-(2-thienyl)quinazoline 195457-51-3P, 6-(3-Furyl)-4-[3-methyl-4-(2-pyridylmethoxy)anilino]quinazoline 195457-52-4P, 4-(3-Chloro-4-fluoroanilino)-6-(4-oxazolyl)quinazoline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

IT 75-12-7, Formamide, reactions 98-80-6, Phenylboronic acid 110-91-8, Morpholine, reactions 288-32-4, Imidazole, reactions 350-46-9, 4-Fluoronitrobenzene 367-21-5, 3-Chloro-4-fluoroaniline 455-88-9, 2-Fluoro-5-nitrotoluene 498-62-4, 3-Thiophenecarbaldehyde 527-69-5, 2-Furoyl chloride 586-98-1, 2-Pyridylmethanol 872-35-5, 2-Mercaptoimidazole 1066-54-2, Trimethylsilylacetylene 1194-02-1, 4-Fluorobenzonitrile 5271-67-0, 2-Thiophenecarbonyl chloride 5414-19-7, Di(2-bromoethyl) ether 5419-55-6, Triisopropyl borate 5794-88-7, 5-Bromoanthranilic acid 6959-47-3, 2-(Chloromethyl)pyridine hydrochloride 6959-48-4, 3-(Chloromethyl)pyridine hydrochloride 10111-08-7, 2-Imidazolecarbaldehyde 13794-72-4, 6,7-Dimethoxy-3,4-dihydroquinazolin-4-one 15091-69-7, 2-Mercaptobenzimidazole sodium salt 16681-70-2, 1,2,3-Triazole-4-carboxylic acid 17997-47-6, 2-Pyridyltri-n-butyltin 18791-75-8, 4-Bromo-2-thiophenecarboxaldehyde 19815-16-8, 4-Chloro-6-nitroquinazoline 20260-53-1, 3-Pyridinecarbonyl chloride hydrochloride 38267-96-8, 6-Bromo-4-chloroquinazoline 39098-97-0, 2-(2-Thienyl)acetyl chloride 50476-76-1, 2-Mercapto-1-methylimidazole sodium salt 55552-70-0, 3-Furylboronic acid 62348-13-4, 5-Isoxazolecarbonyl chloride 86591-76-6, 2-Fluoroimidazole 4-toluenesulfonic acid salt 89878-14-8, Diethyl-3-pyridylborane 94158-07-3, 4-Mercapto-1,2,3-triazole disodium salt 103885-30-9, Diisopropyl 2-furylboronate 109529-38-6, Diisopropyl 3-furylboronate 124429-26-1, 4-Chloroquinazoline hydrochloride 137049-00-4, 1-Methylimidazole-4-sulfonyl chloride 146871-73-0, 6-Bromo-4-(3-methylanilino)quinazoline hydrochloride 153436-70-5, 6-Amino-4-(3-methylanilino)quinazoline 161830-32-6, 6-Amino-4-(3-chloro-4-fluoroanilino)-7-(methylamino)quinazoline 179246-11-8, 6-Acetoxy-4-chloroquinazoline 194851-20-2, Diisopropyl 3-thienylboronate 195457-63-7, Diisopropyl (4-cyanophenyl)boronate 195457-64-8, Diisopropyl 2-thienylboronate 195457-65-9, 6-(Bromomethyl)-4-(3-methylanilino)quinazoline
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of quinazoline derivs. as antitumor agents and antiproliferatives)

L13 ANSWER 22 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 127:34137 MARPAT
TITLE: Preparation of quinoline and quinazoline derivatives inhibiting platelet-derived growth factor receptor autophosphorylation
INVENTOR(S): Kubo, Kazuo; Ohyama, Shinichi; Shimizu, Toshiyuki; Nishitoba, Tsuyoshi; Kato, Shinichiro; Murooka, Hideko; Kobayashi, Yoshiko; et al.
PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 243 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9717329	A1	19970515	WO 1996-JP3229	19961105
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9673400	A1	19970529	AU 1996-73400	19961105
EP 860433	A1	19980826	EP 1996-935541	19961105
EP 860433	B1	20020703		
R: CH, DE, FR, GB, LI				
TW 483891	B	20020421	TW 1996-85113529	19961106
US 6143764	A	20001107	US 1998-68660	19980506
PRIORITY APPLN. INFO.:			JP 1995-313555	19951107
			JP 1996-62121	19960223
			WO 1996-JP3229	19961105

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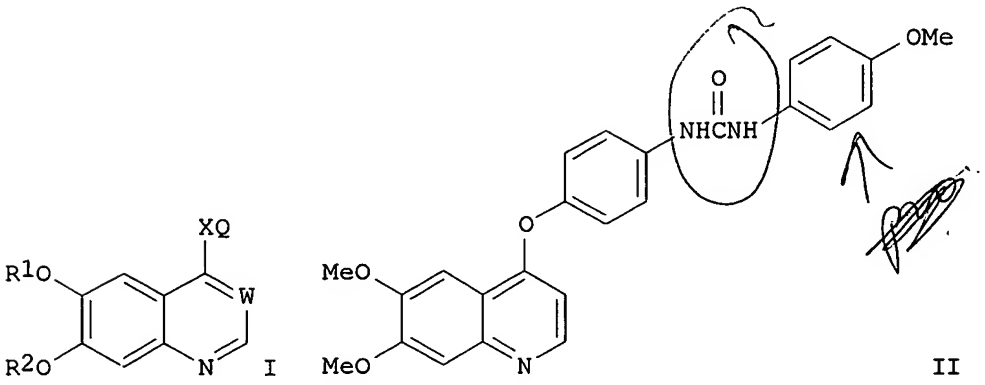

AB The title compds. I [R1 and R2 represent each H or C1-4 alkyl, or R1 and R2 together form C1 to C3 alkylene; X represents O, S or CH2; W represents CH or N; and Q represents substituted aryl or substituted heteroaryl] are prepared I inhibit platelet-derived growth factor receptor autophosphorylation and are useful in the treatment of cancer, arthritis, etc. The title compound II (preparation given) (at 100 mg/kg i.p. once daily for 9 days) increased the survival of mice with transplanted leukemic P388 cells by 130%.

IC ICM C07D215-20
ICS C07D215-22; C07D215-36; C07D239-74; C07D239-88; C07D239-93; C07D401-12; C07D405-12; C07D409-12; C07D491-056; A61K031-47;

A61K031-505

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 28

ST quinoline PDGF receptor autophosphorylation inhibitor; quinazoline PDGF receptor autophosphorylation inhibitor; PDGF receptor autophosphorylation inhibitor quinoline quinazoline; neoplasm inhibitor quinoline quinazoline; arthritis inhibitor quinoline quinazoline

IT Artery, disease
(coronary, restenosis; quinoline and quinazoline derivs. with effect on restenosis)

IT Platelet-derived growth factor receptors
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(preparation of quinoline and quinazoline derivs. inhibiting platelet-derived growth factor receptor autophosphorylation)

IT Anti-inflammatory agents
Antitumor agents
(quinoline and quinazoline derivs.)

IT Arthritis
(quinoline and quinazoline derivs. with effect on arthritis)

IT Leukemia
(quinoline and quinazoline derivs. with effect on leukemia)

IT 190726-38-6P 190726-39-7P 190726-40-0P 190726-41-1P 190726-42-2P
190726-43-3P 190726-44-4P 190726-45-5P 190726-46-6P 190726-47-7P
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190727-57-2P 190727-58-3P 190727-59-4P 190727-60-7P 190727-61-8P
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190727-82-3P 190727-83-4P 190727-84-5P 190727-85-6P 190727-86-7P
190727-87-8P 190727-88-9P 190727-89-0P 190727-90-3P 190727-91-4P
190727-92-5P 190727-93-6P 190727-94-7P 190727-95-8P 190727-96-9P
190727-97-0P 190727-98-1P 190727-99-2P 190728-00-8P 190728-01-9P
190728-02-0P 190728-03-1P 190728-04-2P 190728-05-3P 190728-06-4P
190728-07-5P 190728-08-6P 190728-09-7P 190728-10-0P 190728-11-1P
190728-12-2P 190728-13-3P 190728-14-4P 190728-15-5P 190728-16-6P

190728-17-7P 190728-18-8P 190728-19-9P 190728-20-2P 190728-21-3P
190771-04-1P 190771-05-2P 190771-06-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoline and quinazoline derivs. inhibiting platelet-derived growth factor receptor autophosphorylation)

IT 55-22-1, Isonicotinic acid, reactions 59-67-6, Nicotinic acid, reactions 62-23-7, 4-Nitrobenzoic acid 64-18-6, Formic acid, reactions 74-88-4, Methyl iodide, reactions 77-78-1, Dimethyl sulfate 83-56-7, 1,5-Dihydroxynaphthalene 86-84-0, 1-Naphthyl isocyanate 87-25-2, Ethyl 2-aminobenzoate 88-13-1, 3-Thiophenecarboxylic acid 88-14-2, 2-Furancarboxylic acid 88-75-5, 2-Nitrophenol 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 92-95-5 93-07-2, 3,4-Dimethoxybenzoic acid 95-55-6, 2-Aminophenol 98-73-7, 4-tert-Butylbenzoic acid 98-98-6, Picolinic acid 100-02-7, reactions 100-07-2, 4-Methoxybenzoyl chloride 100-28-7, 4-Nitrophenyl isocyanate 100-61-8, N-Methylaniline, reactions 100-66-3, reactions 102-29-4, Resorcin monoacetate 102-36-3, 3,4-Dichlorophenyl isocyanate 102-56-7, 2,5-Dimethoxyaniline 103-71-9, Phenyl isocyanate, reactions 104-12-1, 4-Chlorophenyl isocyanate 106-41-2, 4-Bromophenol 107-30-2, Chloromethyl methyl ether 110-78-1, Propyl isocyanate 110-89-4, Piperidine, reactions 111-36-4, Butyl isocyanate 122-04-3, 4-Nitrobenzoyl chloride 135-19-3, β-Naphthol, reactions 150-19-6, 3-Methoxyphenol 150-76-5, 4-Methoxyphenol 312-94-7, 2-(Trifluoromethyl)benzoyl chloride 328-74-5, 3,5-Bis(trifluoromethyl)aniline 328-93-8, 2,5-Bis(trifluoromethyl)aniline 329-15-7, 4-(Trifluoromethyl)benzoyl chloride 363-81-5, 2,4,6-Trifluoroaniline 367-34-0, 2,4,5-Trifluoroaniline 372-20-3, 3-Fluorophenol 372-39-4, 3,5-Difluoroaniline 393-52-2, 2-Fluorobenzoyl chloride 420-04-2, Cyanamide 455-24-3, 4-Trifluoromethylbenzoic acid 504-15-4, Orcinol 527-69-5, 2-Furoyl chloride 527-72-0, 2-Thiophenecarboxylic acid 554-84-7, 3-Nitrophenol 578-67-6, 5-Hydroxyquinoline 580-16-5, 6-Hydroxyquinoline 581-43-1, 2,6-Dihydroxynaphthalene 586-75-4, 4-Bromobenzoyl chloride 586-76-5, 4-Bromobenzoic acid 586-89-0, 4-Acetylbenzoic acid 591-27-5, 3-Aminophenol 614-68-6, 2-Methylphenyl isocyanate 614-69-7 618-46-2, 3-Chlorobenzoyl chloride 619-84-1, 4-Dimethylaminobenzoic acid 621-29-4, 3-Methylphenyl isocyanate 696-63-9, 4-Methoxybenzenethiol 769-92-6, 4-tert-Butylaniline 874-60-2, 4-Toluoyl chloride 933-88-0, 2-Methylbenzoyl chloride 1137-41-3, 4-Aminobenzophenone 1137-42-4, 4-Hydroxybenzophenone 1195-45-5, 4-Fluorophenyl isocyanate 1461-22-9, Tributyltin chloride 1476-23-9, Allyl isocyanate 1548-13-6, 4-Trifluoromethylphenyl isocyanate 1632-84-4, 4-Methylthiophenyl isocyanate 1679-64-7, Monomethyl terephthalate 1710-98-1, 4-tert-Butylbenzoyl chloride 1711-02-0, 4-Iodobenzoyl chloride 1711-06-4, 3-Methylbenzoyl chloride 1711-07-5, 3-Fluorobenzoyl chloride 1953-54-4, 5-Hydroxyindole 2033-89-8, 3,4-Dimethoxyphenol 2243-83-6, 2-Naphthoyl chloride 2251-65-2, 3-(Trifluoromethyl)benzoyl chloride 2345-34-8 2380-94-1, 4-Hydroxyindole 2493-02-9, 4-Bromophenyl isocyanate 2525-62-4, Hexyl isocyanate 2612-57-9, 2,4-Dichlorophenyl isocyanate 2719-27-9, Cyclohexanecarbonyl chloride 2735-04-8, 2,4-Dimethoxyaniline 2836-04-6, 3-Dimethylaminoaniline 2987-53-3, 2-Methylthioaniline 3024-72-4, 3,4-Dichlorobenzoyl chloride 3158-26-7, Octyl isocyanate 3173-53-3, Cyclohexyl isocyanate 3320-83-0, 2-Chlorophenyl isocyanate 3320-87-4, 3-Nitrophenyl isocyanate 3400-45-1, Cyclopentanecarboxylic

acid 3731-51-9, 2-Pyridylmethylamine 3731-52-0, 3-Pyridylmethylamine
3731-53-1, 4-Pyridylmethylamine 3862-73-5, 2,3,4-Trifluoroaniline
3863-11-4, 3,4-Difluoroaniline 4461-33-0, Benzoyl isocyanate
4519-40-8, 2,3-Difluoroaniline 5060-82-2, 7-Methoxy-2-naphthol
5271-67-0, 2-Thenoyl chloride 5279-59-4 5332-73-0,
3-Methoxypropylamine 5369-34-6 5416-93-3, 4-Methoxyphenyl isocyanate
6068-72-0, 4-Cyanobenzoyl chloride 6299-67-8, 2,3-Dimethoxyaniline
6315-89-5, 3,4-Dimethoxyaniline 7439-95-4, Magnesium, reactions
10272-07-8, 3,5-Dimethoxyaniline 13020-57-0, 3-Hydroxybenzophenone
14002-51-8, 4-Phenylbenzoyl chloride 15570-12-4, 3-Methoxybenzenethiol
16532-79-9, 4-Bromophenylacetonitrile 16744-98-2, 2-Fluorophenyl
isocyanate 17295-26-0 18908-07-1, 3-Methoxyphenyl isocyanate
20029-52-1, 4-Cyclohexylbenzoic acid 20651-71-2, 4-Butylbenzoic acid
22013-33-8, 3,4-Ethylenedioxyaniline 23138-50-3, 4-Ethylphenyl
isocyanate 24313-88-0, 3,4,5-Trimethoxyaniline 24544-04-5,
2,6-Diisopropylaniline 25054-53-9, Piperonyloyl chloride 28162-63-2,
4-Chloro-2-nitrophenyl isocyanate 28788-62-7, 4-(Butyl)benzoyl chloride
31027-31-3, 4-Isopropylphenyl isocyanate 32202-61-2, 4-Aminoindan
32315-10-9, Triphosgene 33863-86-4, 4-Butoxybenzoyl chloride
34893-92-0, 3,5-Dichlorophenyl isocyanate 35654-56-9,
4-Chloro-6,7-dimethoxyquinoline 37408-18-7, 4-Chloro-2-methylphenyl
isocyanate 39718-32-6, 2,5-Difluorophenyl isocyanate 39920-37-1,
2,6-Dichlorophenyl isocyanate 40397-90-8, 3-Chloro-2-methylphenyl
isocyanate 40397-95-3, 2-Chloro-4-nitrophenyl isocyanate 40397-96-4,
4-Chloro-3-nitrophenyl isocyanate 41195-90-8, 2,3-Dichlorophenyl
isocyanate 42019-78-3 42271-43-2 42862-36-2, Adamantanecarboxylic
acid 49647-20-3, 4-Acetylphenyl isocyanate 55440-54-5 55440-55-6
55467-95-3 56309-55-8, 3-Chloro-2-methoxyphenyl isocyanate 56309-56-9,
2-Isopropylphenyl isocyanate 59025-55-7, 2,4-Difluorophenyl isocyanate
59377-19-4, 4-Phenoxyphenyl isocyanate 59776-60-2, 3,5-Dinitrophenyl
isocyanate 65295-69-4, 2,6-Difluorophenyl isocyanate 67531-68-4,
3-Ethoxycarbonylphenyl isocyanate 67815-56-9 69342-47-8, 4-Butylphenyl
isocyanate 88330-64-7, 2-Chloro-3-methylphenyl isocyanate 88442-63-1,
1-(1-Naphthyl)ethyl isocyanate 143071-78-7 190728-38-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of quinoline and quinazoline derivs. inhibiting
platelet-derived growth factor receptor autophosphorylation)

IT 134-92-9P 732-55-8P 845-05-6P 3558-83-6P 3588-80-5P 4160-63-8P
4179-19-5P, 3,5-Dimethoxytoluene 4369-50-0P 4682-94-4P 7469-80-9P
18920-70-2P 21084-27-5P 22604-07-5P 25458-45-1P 25913-05-7P
27645-61-0P 38281-73-1P 38459-58-4P 39070-90-1P 39070-97-8P
41204-59-5P 52981-01-8P 53039-63-7P 54118-73-9P 54118-75-1P
55044-96-7P 60013-02-7P 61002-52-6P 64357-38-6P 66803-01-8P
66938-32-7P 71372-37-7P 79447-11-3P 96719-99-2P 113275-52-8P
131391-84-9P 190728-22-4P 190728-23-5P 190728-24-6P 190728-25-7P
190728-26-8P 190728-27-9P 190728-28-0P 190728-29-1P 190728-30-4P
190728-31-5P 190728-32-6P 190728-33-7P 190728-34-8P 190728-35-9P
190728-36-0P 190728-37-1P 190771-03-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of quinoline and quinazoline derivs. inhibiting
platelet-derived growth factor receptor autophosphorylation)

L13 ANSWER 23 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 125:142761 MARPAT
TITLE: Quinazoline derivatives

INVENTOR(S): Barker, Andrew John
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9616960	A1	19960606	WO 1995-GB2768	19951128
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9539330	A1	19960619	AU 1995-39330	19951128
EP 794953	A1	19970917	EP 1995-937126	19951128
EP 794953	B1	19990506		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10509972	T2	19980929	JP 1995-518417	19951128
AT 179708	E	19990515	AT 1995-937126	19951128
US 5955464	A	19990921	US 1997-860088	19970522
PRIORITY APPLN. INFO.:			GB 1994-24233	19941130
			WO 1995-GB2768	19951128

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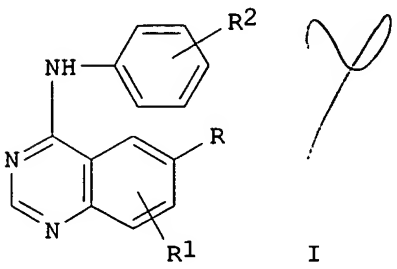

I

AB The invention concerns quinazoline derivs. I (m = 1, 2; R1 = H, halo, alkyl, alkoxy; n = 1-3; R2 = H, OH, halo, alkyl; R = 5- or 9-membered nitrogen-linked heteroaryl moiety containing up to four nitrogen heteroatoms,
or R = a 5-, 6-, 9- or 10-membered nitrogen-linked unsatd. heterocyclic moiety containing up to three nitrogen heteroatoms which bears one or two substituents selected from oxo and thioxo) and the use of the receptor tyrosine kinase inhibitory properties of the compds. in the treatment of proliferative diseases such as cancer. Among the approx. 15 title compds. prepared, 4-(3-methylanilino)-, 4-(3-chloro-4-fluoroanilino)-, 4-(4-benzoyl-3-chloroanilino)-, and 4-[3-methyl-4-(2-pyridylmethoxy)anilino]-6-(1-imidazolyl)quinazolines were claimed.
IC ICM C07D403-04

ICS C07D401-04; C07D401-14
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
ST neoplasm inhibitor imidazolyl quinazoline prepn
IT Neoplasm inhibitors
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of tyrosine kinase inhibiting imidazolylquinazolines)
IT 179552-59-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of tyrosine kinase inhibiting imidazolylquinazolines)
IT 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(preparation of tyrosine kinase inhibiting imidazolylquinazolines)
IT 51-17-2, Benzimidazole 75-12-7, Formamide, reactions 99-60-5, 2-Chloro-4-nitrobenzoic acid 108-44-1, 3-Methylaniline, reactions 142-08-5, 2(1H)-Pyridinone 288-32-4, Imidazole, reactions 288-88-0, 1H-1,2,4-Triazole 367-21-5, 3-Chloro-4-fluoroaniline 367-25-9, 2,4-Difluoroaniline 394-41-2, 3-Fluoro-4-nitrophenol 403-54-3, 3-Fluorobenzonitrile 446-08-2, 2-Amino-5-fluorobenzoic acid 455-88-9, 2-Fluoro-5-nitrotoluene 586-98-1, 2-Pyridylmethanol 645-36-3, 2-Aminoacetaldehyde diethyl acetal 693-98-1, 2-Methylimidazole 3863-11-4, 3,4-Difluoroaniline 4377-33-7, 2-Pyridylmethyl chloride 16499-61-9 34662-31-2, 5-Chloro-2-nitrobenzonitrile 72762-00-6, 2-Hydroxypyridine 162012-71-7 179552-76-2 179552-94-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tyrosine kinase inhibiting imidazolylquinazolines)
IT 7073-36-1P, 2-Chloro-4-nitrobenzoyl chloride 16499-56-2P 33663-73-9P, 2-Chloro-4-nitrobenzophenone 50594-78-0P, 5-Fluoro-2-nitrobenzonitrile 61747-12-4P, 4-Amino-2-chlorobenzophenone 159686-93-8P 159686-95-0P 179552-58-0P 179552-60-4P 179552-61-5P 179552-63-7P 179552-68-2P 179552-69-3P 179552-70-6P 179552-73-9P 179552-74-0P 179552-75-1P 179552-79-5P 179552-82-0P 179552-85-3P 179552-86-4P 179552-87-5P 179552-89-7P 179552-90-0P 179552-92-2P 179552-95-5P 179552-96-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tyrosine kinase inhibiting imidazolylquinazolines)
IT 179552-62-6P 179552-64-8P 179552-65-9P 179552-66-0P 179552-67-1P 179552-71-7P 179552-72-8P 179552-77-3P 179552-78-4P 179552-80-8P 179552-81-9P 179552-83-1P 179552-84-2P 179552-88-6P 179552-91-1P 179552-93-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of tyrosine kinase inhibiting imidazolylquinazolines)

L13 ANSWER 24 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 125:142741 MARPAT
TITLE: Preparation of N-phenyl-4-quinazolinamines for the treatment of proliferative diseases
INVENTOR(S): Brown, Dearg Sutherland; Morris, Jeffrey James; Thomas, Andrew Peter
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 120 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9615118	A1	19960523	WO 1995-GB2606	19951108
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2200871	AA	19960523	CA 1995-2200871	19951108
AU 9538130	A1	19960606	AU 1995-38130	19951108
AU 703328	B2	19990325		
EP 790986	A1	19970827	EP 1995-936044	19951108
EP 790986	B1	19990120		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10508616	T2	19980825	JP 1995-515816	19951108
AT 175962	E	19990215	AT 1995-936044	19951108
ES 2128092	T3	19990501	ES 1995-936044	19951108
ZA 9509572	A	19960513	ZA 1995-9572	19951110
IL 115959	A1	20040620	IL 1995-115959	19951112
FI 9701970	A	19970507	FI 1997-1970	19970507
NO 9702152	A	19970512	NO 1997-2152	19970509
US 5821246	A	19981013	US 1997-836362	19970521

PRIORITY APPLN. INFO.: GB 1994-22866 19941112
GB 1995-7308 19950407
WO 1995-GB2606 19951108

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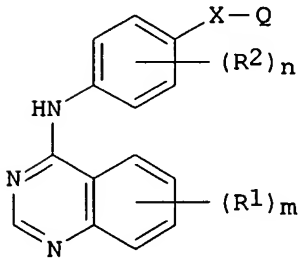

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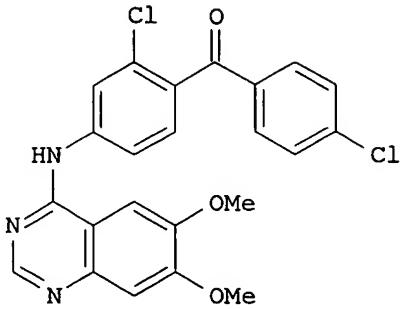

II

AB The title compds. I (m = 1-3; R1 = halo, hydroxy, amino, ureido, etc.; n = 0-3; R2 = halo, trifluoromethyl, hydroxy, amino, nitri, cyano, alkyl; X = carbonyl, methine, O,S, etc.) were disclosed. I were claimed for the use as receptor tyrosine kinase inhibitors and for treatment of proliferative

disease such as cancer. An example compound is the chlorophenyl [(quinazolinyl)amino]phenyl methanone II.

IC ICM C07D239-94
ICS C07D417-12; C07D401-12; A61K031-505

CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST quinazolinamine prepn proliferative disease neoplasm inhibitor; quinazolinylaminophenyl methanone prepn tyrosine kinase inhibitor

IT Neoplasm inhibitors
(preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

IT Disease
(proliferative, preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

IT 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitors; preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

IT 60-56-0, 1-Methyl-2-imidazolethiol 62-53-3, Aniline, reactions 98-00-0, 2-Furanmethanol 99-60-5, 2-Chloro-4-nitrobenzoic acid 100-51-6, Benzenemethanol, reactions 108-43-0, 3-Chlorophenol 108-98-5, Thiophenol, reactions 110-02-1, Thiophene 121-87-9, 2-Chloro-4-nitroaniline 142-08-5, 2-Hydroxypyridine 288-32-4, Imidazole, reactions 288-42-6, Oxazole 288-47-1, Thiazole 350-30-1, 3-Chloro-4-fluoronitrobenzene 350-46-9, 4-Fluoronitrobenzene 369-34-6, 3,4-Difluoronitrobenzene 394-31-0, 5-Hydroxyanthranilic acid 394-41-2, 3-Fluoro-4-nitrophenol 455-88-9, 2-Fluoro-5-nitrotoluene 586-98-1, 2-Pyridine methanol 636-72-6, 2-Thiophenemethanol 872-31-1, 3-Bromothiophene 872-35-5, 2-Imidazolethiol 872-85-5, 4-Pyridinecarboxaldehyde 1003-56-1, 2-Hydroxy-3-methylpyridine 1122-71-0 2637-34-5, 2-Pyridinethiol 3943-89-3 4377-33-7, 2-Pyridylmethyl chloride 4584-46-7, 2-(Dimethylamino)ethyl chloride hydrochloride 5470-22-4 5568-33-2, 2-Chloro-4-nitrobenzaldehyde 5685-05-2, 2-Thiazolethiol 6482-24-2, 2-Bromoethyl methyl ether 6943-17-5 7073-36-1, 2-Chloro-4-nitrobenzoyl chloride 7357-67-7, 3-Morpholinopropyl chloride 7774-74-5, 2-Thiophenethiol 13794-72-4 14542-12-2, 2-Thiazolemethanol 17201-43-3, 4-Cyanobenzyl bromide 19815-16-8 36255-44-4 38267-96-8 41252-96-4, 3-Chloro-4-iodonitrobenzene 42508-74-7 60547-98-0 63071-10-3, 2-Pyridinemethanol 4-chloro 66684-57-9, 2,3,5-Trifluoronitrobenzene 79562-49-5, 2,6-Difluoro-3-nitrotoluene 129912-30-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

IT 771-69-7P, 2,3,4-Trifluoronitrobenzene 5335-29-5P, 4-Amino-2-chlorophenyl phenyl ether 5407-04-5P 6373-46-2P 16064-10-1P 16665-38-6P 17334-08-6P 18368-66-6P, 3-Methyl-2-pyridinethiol 22098-88-0P 24484-93-3P 29482-57-3P 31374-18-2P 32631-26-8P 33663-73-9P, 2-Chloro-4-nitrobenzophenone 53449-14-2P 56966-69-9P 61278-81-7P 61747-12-4P, 4-Amino-2-Chlorobenzophenone 64160-38-9P 71501-31-0P 76590-41-5P 88681-04-3P 103790-89-2P 133303-87-4P 162012-71-7P 179246-11-8P 179552-79-5P 179687-02-6P 179687-03-7P 179687-04-8P 179687-05-9P 179687-06-0P 179687-07-1P 179687-08-2P 179687-09-3P 179687-10-6P 179687-11-7P 179687-12-8P 179687-13-9P 179687-14-0P 179687-60-6P 179687-61-7P 179687-62-8P 179687-63-9P 179687-64-0P 179687-65-1P 179687-66-2P 179687-67-3P 179687-68-4P

179687-69-5P 179687-70-8P 179687-71-9P 179687-72-0P 179687-73-1P
179687-74-2P 179687-75-3P 179687-76-4P 179687-77-5P 179687-78-6P
179687-79-7P 179687-80-0P 179687-81-1P 179687-82-2P 179687-83-3P
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179688-56-3P 179688-57-4P 179688-58-5P 179688-69-8P 179688-70-1P
179688-71-2P 179688-72-3P 179688-73-4P 179688-90-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

IT 179688-34-7P 179688-35-8P 179688-36-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

IT 179246-75-4P 179687-15-1P 179687-16-2P 179687-17-3P 179687-18-4P
179687-19-5P 179687-20-8P 179687-21-9P 179687-22-0P 179687-23-1P
179687-24-2P 179687-25-3P 179687-26-4P 179687-27-5P 179687-28-6P
179687-29-7P 179687-30-0P 179687-31-1P 179687-32-2P 179687-33-3P
179687-34-4P 179687-35-5P 179687-36-6P 179687-37-7P 179687-38-8P
179687-39-9P 179687-40-2P 179687-41-3P 179687-42-4P 179687-43-5P
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179688-39-2P 179688-40-5P 179688-41-6P 179688-42-7P 179688-43-8P
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179688-84-7P 179688-85-8P 179688-86-9P 179688-87-0P 179688-88-1P
179688-89-2P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-phenylquinazolinamines as tyrosine kinase inhibitors)

L13 ANSWER 25 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 125:114665 MARPAT
TITLE: Preparation of quinoline and quinazoline protein tyrosine kinase inhibitors
INVENTOR(S): Hudson, Alan Thomas; Vile, Sadie; Barraclough, Paul; Franzmann, Karl Witold; McKeown, Stephen Carl; Page, Martin John
PATENT ASSIGNEE(S): Wellcome Foundation Limited, UK
SOURCE: PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9609294	A1	19960328	WO 1995-GB2202	19950918
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9534824	A1	19960409	AU 1995-34824	19950918
ZA 9507853	A	19970318	ZA 1995-7853	19950918
EP 782570	A1	19970709	EP 1995-931351	19950918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10505600	T2	19980602	JP 1995-509740	19950918

PRIORITY APPLN. INFO.: GB 1994-18852 19940919
GB 1995-7788 19950413
GB 1995-10757 19950526
WO 1995-GB2202 19950918

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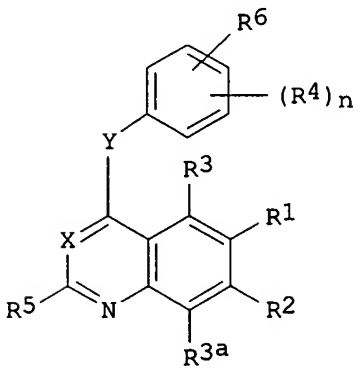

I

AB The title compds. [I; X = N, CH; Y = W(CH2), (CH2)W, W; W = O, S(O)m, (un)substituted NH; R1 = NH2, H, halogen, OH, NO2, CO2H, CF3, CF3O, ureido, etc.; R4 = H, OH, halogen, alkyl, alkoxy, alkylthio, CN, NO2, CF3, etc.; n = 1-3; R5 = H, halogen, CF3, alkyl, alkoxy; R6 = substituted hydrocarbyl, etc.], which are protein tyrosine kinase inhibitors, are prepared Thus, 4-chloroquinoline was reacted with 4-methoxyaniline in the presence of HCl, producing 4-(4-phenoxyanilino)quinoline hydrochloride, m.p. 216-218°, which demonstrated a IC50 against p561ck protein tyrosine kinase of 5 μM.

IC ICM C07D239-94
ICS C07D239-88; C07D239-95; C07D215-44; C07D409-12; A61K031-505

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST phenoxyanilinoquinoline prepn protein tyrosine kinase inhibitor; antiatherosclerotic prepn quinazoline; antitumor agent prepn quinazoline;

antithrombotic prepn quinazoline

IT Anticoagulants and Antithrombotics
Neoplasm inhibitors
(quinolines and quinazolines)

IT Antiarteriosclerotics
(antiatherosclerotics, quinolines and quinazolines)

IT 80449-02-1, Protein tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(preparation of quinoline and quinazoline inhibitors of)

IT 179246-59-4P 179246-80-1P 179247-03-1P 179247-09-7P 179247-14-4P
179248-74-9P 179248-75-0P 179248-76-1P 179248-77-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of quinoline and quinazoline protein tyrosine kinase inhibitors)

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179248-73-8P 179248-81-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoline and quinazoline protein tyrosine kinase inhibitors)

IT 62-55-5, Ethanethioamide 72-14-0 88-30-2, 4-Nitro-3-(trifluoromethyl)phenol 98-00-0, 2-Furanmethanol 99-28-5, 2,6-Dibromo-4-nitrophenol 99-65-0, 1,3-Dinitrobenzene 100-02-7, 4-Nitrophenol, reactions 100-11-8, 4-Nitrobenzylbromide 100-39-0, Benzyl bromide 100-44-7, Benzyl chloride, reactions 100-51-6, Benzenemethanol, reactions 101-79-1, 4-(4-Chlorophenoxy)aniline 103-16-2 108-24-7, Acetic anhydride 108-95-2, Phenol, reactions 108-98-5, Thiophenol, reactions 139-59-3, 4-Phenoxyaniline 350-46-9, 4-Fluoronitrobenzene 400-74-8, 4-Fluoro-3-trifluoromethylnitrobenzene 403-19-0, 2-Fluoro-4-nitrophenol 446-32-2 446-48-0, 2-Fluorobenzyl bromide 455-88-9, 2-Fluoro-5-nitrotoluene 491-36-1, 4(1H)-Quinazolinone 536-74-3, Phenylacetylene 540-37-4, 4-Iodoaniline 578-51-8, 2-Bromobenzyl chloride 611-35-8 616-79-5 619-08-9, 2-Chloro-4-nitrophenol 636-72-6, 2-Thiophenemethanol 637-89-8 697-73-4, 2,6-Difluorobenzyl chloride 712-97-0 778-94-9 782-45-6, 4-Aminobenzanilide 834-24-2, 4-Aminostilbene 836-43-1, 4-Benzyloxybenzyl alcohol 1135-12-2, 4-Aminodiphenylmethane 1135-14-4, 4-(Phenylthio)aniline 1137-41-3, 4-Aminobenzophenone 1484-26-0 1836-75-5, 4-(2,4-Dichlorophenoxy)nitrobenzene 1849-36-1, 4-Nitrothiophenol 2014-83-7, 2,6-Dichlorobenzyl chloride 2359-60-6, N-(4-Aminophenyl)piperidine 2524-67-6, N-(4-Aminophenyl)morpholine 2550-36-9, Cyclohexylmethyl bromide 2581-34-2, 3-Methyl-4-nitrophenol 3096-81-9, 4-Phenoxybenzonitrile 3251-56-7, 2-Methoxy-4-nitrophenol 3473-63-0 3586-12-7, 3-Phenoxyaniline 4295-06-1, 4-Chloro-2-methylquinoline 4360-63-8, 2-Bromomethyl-1,3-dioxolane 4412-91-3, 3-Furanmethanol 5326-47-6 5653-40-7 6373-46-2 6373-50-8, 4-Cyclohexylaniline 6958-39-0 6972-71-0 7035-02-1, 2-Methoxybenzyl chloride 13425-93-9 16064-14-5 16064-25-8 16499-57-3 17417-09-3, 2-Fluoro-5-nitrobenzonitrile 20197-71-1 20872-93-9 22544-04-3, 3-Chloro-4-(2,4-dichlorophenoxy)nitrobenzene 26697-35-8, 4-Benzyloxy-2-nitroaniline 30519-03-0 32084-59-6 33884-43-4, 2-(2-Bromoethyl)-1,3-dioxane 57940-05-3 58230-69-6 60233-66-1 71637-34-8, 3-Thiophenemethanol 76243-24-8, 4-Benzyloxy-3-fluoronitrobenzene 76745-74-9 108711-21-3 121180-51-6 152305-23-2 175201-90-8, 4-(3-Aminophenyl)-2-methylpyrimidine 179246-09-4 179248-83-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of quinoline and quinazoline protein tyrosine kinase inhibitors)

IT 713-41-7P 716-32-5P 721-00-6P 1591-38-4P 1849-25-8P 2148-55-2P 2148-57-4P 2976-71-8P 3048-12-2P 4792-60-3P 5190-68-1P 6943-17-5P 7253-22-7P 7703-38-0P 13024-49-2P 13738-70-0P 13790-39-1P 14861-17-7P, 4-(2,4-Dichlorophenoxy)aniline 15015-57-3P

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179248-82-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of quinoline and quinazoline protein tyrosine kinase inhibitors)

L13 ANSWER 26 OF 26 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 115:159168 MARPAT
TITLE: Preparation of 5-phenylcarbamoyl-4(6)-oxo-6(4)-oxido-(1H,5H)-pyrimidinium betaines and their hydrates as anthelmintics
INVENTOR(S): Molleyres, Louis Pierre
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 430885	A2	19910605	EP 1990-810907	19901122
EP 430885	A3	19911106		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5151427	A	19920929	US 1990-619272	19901128
CA 2031147	AA	19910602	CA 1990-2031147	19901129
AU 9067651	A1	19910606	AU 1990-67651	19901130
JP 03181479	A2	19910807	JP 1990-330872	19901130
ZA 9009629	A	19910828	ZA 1990-9629	19901130

PRIORITY APPLN. INFO.: CH 1989-4297 19891201
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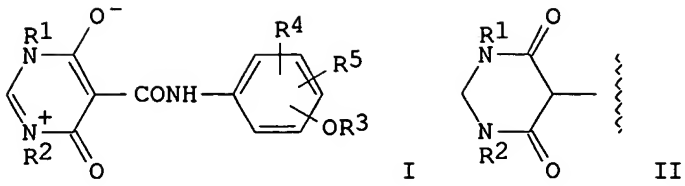
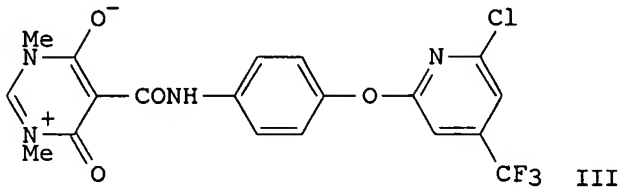


I

II



III

AB Title compds. [I and II; R1, R2 = alkyl, allyl, cycloalkyl, Ph, PhCH2; R3 = (substituted) (benzannelated) 6-membered heteroaryl; R4, R5 = H, alkyl, alkoxy, haloalkyl], were prepared Thus, 1,3-dimethyl-5-[4-(4-trifluoromethyl-6-chloropyridyl-2-oxy)phenylcarbamoyl]-2-thiobarbituric acid was refluxed 45 min with Bu3SnH and azobisisobutyronitrile to give 23% title compound III. Several I at ≤20 mg/kg orally in sheep infected with, e.g., Haemonchus contortus and Trichostrongylus colubriformis reduced nematode nos. by .apprx.90% after 7-10 days.

IC ICM C07D401-12
ICS C07D403-12; A61K031-505; A01N043-54

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 5

ST phenylcarbamoyloxooxidopyrimidinium betaine prepn nematocide; pyrimidinium betaine phenylcarbamoyloxooxido nematocide prepn

IT Anthelmintics
((phenylcarbamoyl)oxooxidopyrimidinium betaines)

IT 136188-99-3P 136189-00-9P 136189-01-0P 136189-02-1P 136189-03-2P
136189-04-3P 136189-05-4P 136189-06-5P 136189-07-6P 136189-08-7P
136189-09-8P 136189-10-1P 136189-11-2P 136189-12-3P 136189-13-4P
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RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anthelmintic)

IT 136189-35-0 136189-36-1 136189-37-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of anthelmintic)

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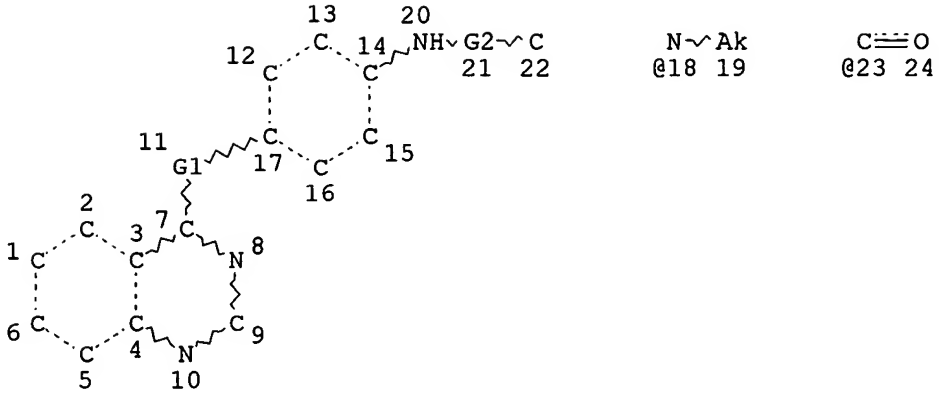

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VAR G2=23/SO2
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DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 19
GGCAT IS LOC AT 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L14 0 SEA FILE=MARPATPREV SSS FUL L10 (MODIFIED ATTRIBUTES)

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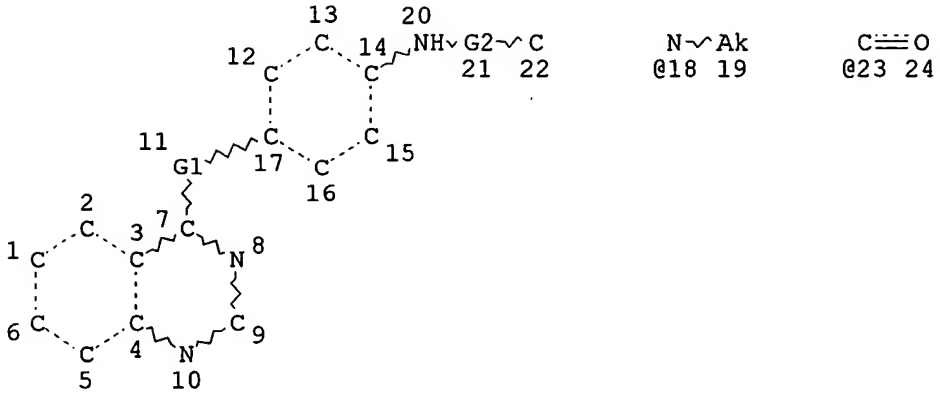

VAR G1=O/S/NH/18
VAR G2=23/SO2
NODE ATTRIBUTES:
NSPEC IS RC AT 22
DEFAULT MLEVEL IS ATOM
GGCAT IS LOC AT 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L16 1 SEA FILE=CASREACT SSS FUL L1 (2 REACTIONS)

100.0% DONE 482 VERIFIED 2 HIT RXNS 1 DOCS
SEARCH TIME: 00.00.01

L16 ANSWER 1 OF 1 CASREACT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 88:948 CASREACT
TITLE: Synthesis and fungistatic activity of aryloxyquinazoline derivatives
AUTHOR(S): Serafin, Barbara; Modzelewski, Maciej; Kurnatowska, Alicja; Kadlubowski, Rosciślaw
CORPORATE SOURCE: Inst. Org. Chem. Technol., Politech. Warsaw, Warsaw, Pol.
SOURCE: European Journal of Medicinal Chemistry (1977), 12(4), 325-31
CODEN: EJMCA5; ISSN: 0223-5234
DOCUMENT TYPE: Journal
LANGUAGE: English
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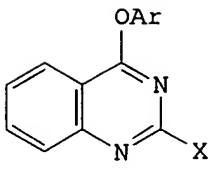
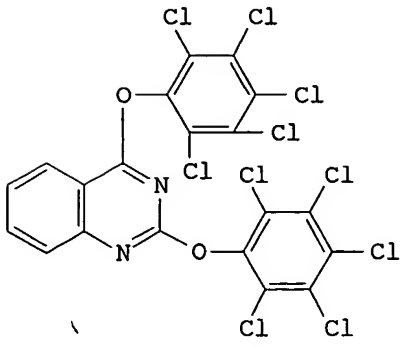


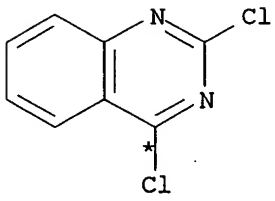
I, X=Cl
II, X=OAr



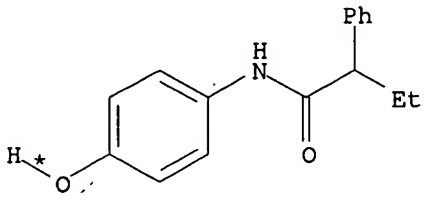
III

AB 2-Chloro-4-aryloxyquinazolines (I) and 2,4-diaryloxyquinazolines (II) were synthesized by reacting 2,4-dichloroquinazoline [607-68-1] with substituted phenols. Of the 50 aryloxyquinazoline derivs. tested for fungistatic activity, >80% of the compds. showed moderate to good inhibition of fungal growth. The diaryloxyquinazoline with pentachloro substitution on both groups (III) [61067-67-2] had the greatest fungistatic activity. A few 2-arylamino-4-aryloxyquinazolines were also synthesized by reacting 2-chloro-4-aryloxyquinazolines with aniline [62-53-3] or 4-chloroaniline [106-47-8].

RX(38) OF 151 ...A + BX ===> **BY**

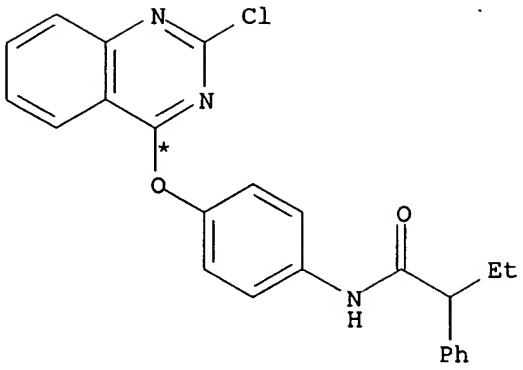


A



BX

(38) →



BY

RX(38) RCT A 607-68-1, BX 2769-41-7
PRO BY **64778-21-8**
SOL 123-91-1 Dioxane

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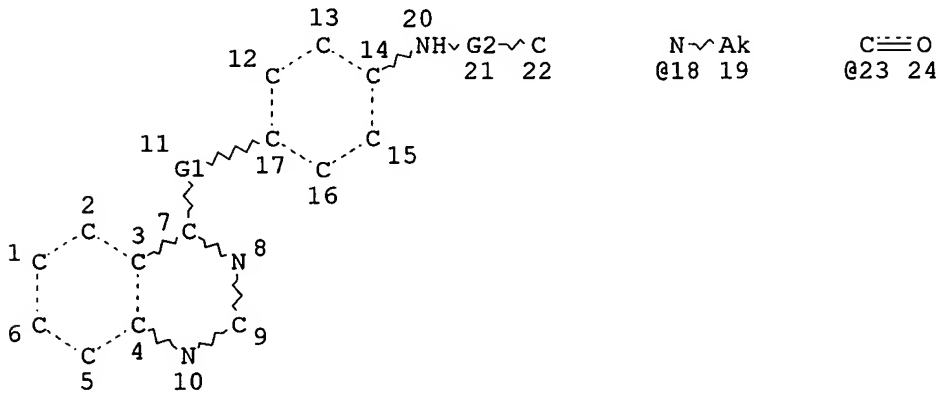

VAR G1=O/S/NH/18
VAR G2=23/SO2
NODE ATTRIBUTES:
NSPEC IS RC AT 22
DEFAULT MLEVEL IS ATOM
GGCAT IS LOC AT 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L17 0 SEA L1

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